THE RELATIONSHIP BETWEEN EXPOSURE TO COMMUNITY VIOLENCE AND ADOLESCENTS' SCHEMAS RELATED TO PSYCHOLOGICAL NEEDS

By

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The purpose of this study was to describe the relationship between adolescents' exposure to community violence, cognitive schemas for their psychological needs, and several social context variables. A sample of 118 middle-school students who lived or attended school in urban neighborhoods of metropolitan Orlando were surveyed to determine whether their level of exposure to community violence would predict their schemas for safety, trust, esteem, intimacy, and control. It was hypothesized that the relationship between adolescents' exposure to community violence and cognitive schemas would vary according to their perceptions of the quality of family relationships, their parents' level of education, and their own gender and ethnicity. However, the results of the study provided little evidence that these social context

variables are significant factors in the interrelationship of cognitive schemas and community violence exposure.

When interactions between community violence exposure and social context variables were eliminated from the study's regression analyses but these social context variables were retained as control variables, exposure to community violence predicted adolescents' schemas related to their own safety and to their trust of others. These schemas were more negative among adolescents with greater exposure to community violence. Moreover, a number of significant relationships between adolescents' cognitive schemas and the social context variables were identified.

CHAPTER 1
INTRODUCTION

Violence is woven into the fabric of the lives of many adolescents living in the United States. In 1994, young Americans under age 18 were murdered at a rate of 7 per day. The majority (53%) of the slain youth were adolescents ages 15 to 17 (Snyder, Sickmund, & Poe-Yamagata, 1996). Adolescents, ages 15 to 19, are more likely to be murdered than are adults over the age of 24, and adolescents, of all ages, are more likely to be victims of the violent crimes of rape, robbery, and assault than are adults of any age (Gull, Lucas, Kratcoski, & Kratcoski, 1996). Moreover, many violent crimes, by virtue of their public nature, involve adolescents as witnesses. For example, Bell and Jenkins (1993) reported that over half the homicides in Chicago in 1990 were committed in settings, such as streets or parks, where the killings could be viewed by bystanders.

Statement of the Problem

Although adolescents are frequent victims (and witnesses) of violence in their communities, little is known about the association between exposure to community violence and adolescents' overall psychological adaptation. Several researchers have cited a need for studies that contribute to an understanding of the assumptions, beliefs, and expectations of adolescents

who are exposed to recurrent violence in their communities (Cicchetti & Lynch, 1993; Garbarino, Kostelny, & Dubrow, 1991; Martinez & Richters, 1993).

Concomitantly, there is a need for a theory from which predictions can be derived about such assumptions, beliefs, and expectations or, alternatively, the cognitive schemas of adolescents who are exposed to repeated episodes of violence in their communities. To be optimally useful, such a theory would generate predictions about variables that moderate the relationship between exposure to community violence and adolescents' schemas for understanding themselves and their world.

Purpose of the Study

One purpose of this study was to describe the assumptions, beliefs, and expectations of adolescents who are exposed to recurrent violence in their communities. A second purpose of this study was to identify variables that moderate the relationship between exposure to community violence and adolescents' cognitive schemas for understanding themselves and their world. I sought to accomplish these goals by applying a theory of psychological trauma, namely, constructivist self-development theory (McCann & Pearlman, 1990), to an investigation of adolescents who are exposed to recurrent violence in their communities. Predictions about the cognitive schemas of adolescents who are exposed to community violence were based on this theory. The cognitive schemas of adolescents examined in this study are those that, according to this theory, are disrupted by traumatic events. These schemas are assumptions, beliefs, and expectations related to psychological needs for

safety, trust, esteem, intimacy, and control. Constructivist self-development theory also was used to develop predictions about variables that moderate the relationship between exposure to community violence and adolescents' schemas for safety, trust, esteem, intimacy, and control. I tested hypotheses that the relationship would be moderated by the following variables: (a) perceived quality of family relationships, (b) level of parents' education, (c) gender, and (d) ethnicity.

Hypotheses

1. Adolescents' cognitive schemas related to their psychological needs for safety, trust, esteem, intimacy, and control will be predicted by their exposure to community violence, perceived quality of family relationships, parents' level of education, gender, ethnicity, and the interactions of exposure to community violence with each of the other independent variables.

    a. With all other variables in the hypothesized regression model controlled, exposure to community violence will be more strongly associated with the presence of negative cognitive schemas for safety, trust, esteem, intimacy, and control among adolescents with fewer positive perceptions of their family relationships.

    b. With all other variables in the hypothesized regression model controlled, the relationship between adolescents' exposure to community violence and their cognitive schemas for safety, trust, esteem, intimacy, and control will differ according to their parents' level of education.

c. With all other variables in the hypothesized regression model controlled, the relationship between adolescents' exposure to community violence and their cognitive schemas for safety, trust, esteem, intimacy, and control will differ according to their gender.

d. With all other variables in the hypothesized regression model controlled, the relationship between adolescents' exposure to community violence and their cognitive schemas for safety, trust, esteem, intimacy, and control will differ according to their ethnicity.

Definition of Terms

Adolescence

According to Fuhrmann (1990), there is no universally accepted definition of adolescence. One difficulty in formulating such a definition is that adolescence has no distinct beginning or end. Usually, the beginning of adolescence is associated with the onset of puberty. However, the first pubertal changes are subtle and difficult to identify. Moreover, some consider that adolescence may begin prior to puberty if environmental circumstances compel a young person's identification with the adolescent group. For example, a girl, who has not yet reached puberty but attends a middle school where the majority of students are pubescent or postpubescent, may think of herself as an adolescent, take on the behaviors associated with this stage, and be considered an adolescent by her peers, teachers, and parents (Manaster, 1989). The end of adolescence is often associated with taking on full adult responsibilities. Yet for some individuals, the assumption of these

responsibilities occurs by age 18, whereas other individuals do not take on full adult responsibilities until they are much older (or never). I limited this investigation to young adolescents. Young adolescent status was defined in terms of grade in school, namely, the completion of at least one year of middle school.

Recent research portrays adolescence, not as a period of storm and stress, but rather, as a transition in which the individual is confronted with new problems and tasks (Kirchler, Palmonari, & Pombeni, 1993; Offer, Ostrov, & Howard, 1981). Havighurst (as cited in Straus, 1994) identified a set of eight complex tasks that adolescents must undertake in order significantly to acquire adult status. These tasks include (a) achieving new and more mature relations with age mates of both genders, (b) achieving a masculine or feminine social role, (c) accepting one's physique and using the body effectively, (d) achieving emotional independence of parents and other adults, (e) preparing for marriage and family life, (f) preparing for an economic career, (g) acquiring a set of values and an ethical system as a guide to behavior--developing an ideology, and (h) desiring and achieving socially responsible behavior. Certain of these tasks (e.g., achieving new and more mature relations with age mates of both genders) are more salient for young adolescents than are others (e.g., preparing for marriage and family life). Importantly for this study, Straus theorized that exposure to violence may interfere with adolescents' achievement of any of these developmental tasks.

Cognitive Schemas

Cognitive schemas are structures of knowledge that specify the general properties of objects or events. They abstract from details in order that objects and events can be assigned to general categories. Cognitive schemas are essential to intelligent information processing. If one had to deal with each object or event in all of its individuality, one would be overwhelmed by the details of ordinary life. Not only do people form schemas related to objects and events, they also develop schemas about their selves and the selves of other people. The concepts of self-schema and others-schema imply that individuals categorize or organize information about their selves and others. Markus (1977) demonstrated that self-schemas are used by individuals to make judgments, decisions, inferences, and predictions about their selves.

McCann and Pearlman (1990) theorized that individuals' self- and others-schemas enable them to organize their life experiences in ways that help them to comprehend their social worlds. Self- and others-schemas may determine much of individuals' interpersonal behavior. In constructivist self-development theory, self- and others-schemas are broadly defined as assumptions, beliefs, and expectations about self and world. The schemas that are of particular interest to this theory are those that relate to the central psychological needs of individuals. Needs for safety, trust, esteem, intimacy, and control in relation to both self and other people are considered to be central to individuals. Cognitive schemas related to those psychological needs are the corresponding beliefs, assumptions, and expectations that individuals have.

According to constructivist self-development theory, disruption to cognitive schemas related to psychological needs occurs as a result of having these needs significantly thwarted. Individuals with disrupted schemas relative to their psychological needs believe that these needs will not, cannot, or should not be satisfied. Negative assumptions, beliefs, and expectations regarding the satisfaction of psychological needs are a central aspect of psychological trauma.

Adolescents' cognitive schemas related to psychological needs are dependent variables in this study. The operational definitions of these cognitive schemas are constituted by the adolescent's scores on the Self- and Others-Schemas Scale and its subscales.

Community

According to Azarya (1985), there are two main approaches to defining community. In one approach, community refers to a group of individuals who share a defined space or geographical area, such as a neighborhood or city. The second approach defines community as a group of individuals who share common ties and a sense of belonging that may derive from common values or interests, kinship relations, beliefs in a common past or fate, and the like. These two approaches have been termed the territorial and the non-territorial. In the territorial approach, the most important basis of commonality among members of a community is their common location. Although common ties of members are recognized by this approach, these ties are not considered sufficient to define a community. Alternatively, in the non-territorial approach, locality is not

considered a distinctive feature of community. Indeed, members of religious or ethnic communities may be geographically dispersed.

Community, as the term is used in this study, most closely resembles that which is described in the territorial approach. Adolescents' community includes persons who commit acts of violence in locations in which the adolescents live and engage in everyday activities. It is assumed that adolescents are able to have first-hand acquaintance with events in their community. Specifically, adolescents are able directly to experience violence that occurs in their community. This study did not examine exposure to violence in communities of such great scope (e.g., national) that adolescents' exposure could be only indirect. Thus, that which adolescents principally have in common with others in their community, as it is defined in this study, is the territory they share. Although the adolescents may perceive common ties within this community, the community is not defined in terms of common ties.

Azarya (1985) observed that demarcating the boundaries of communities is one of the most difficult aspects of their identification. However, he noted that there is some consensus of opinion that a community is a microcosm of society and includes subsystems such as government, economy, education, religion, and family. This study examined direct exposure to violence that occurred in most spheres of adolescents' community. However, violence between members of adolescents' families was considered to be outside the scope of this study. Consequently, this type of violence was not assessed.

Constructivism

The constructivist perspective is based on the assumption that individuals actively construct significant components of the social reality in which they live. In constructivist self-development theory (McCann & Pearlman, 1990), this construction is theorized to occur via the individual's cognitive schemas. Schemas create and constrain, rather than just filter, reality. They determine to what information an individual will attend and how that information will be interpreted. Beyond determining how individuals construe their reality, schemas help individuals to select the experiences they will have. According to constructivist self-development theory, individuals seek out experiences that confirm their schemas and avoid experiences that challenge them.

Exposure to Community Violence

Exposure to community violence is one of the independent variables in this study. It is an adolescent's witnessing of, or victimization by, one or more of 12 forms of violence or violence-related events that are identified on the Survey of Exposure to Community Violence (Richters & Saltzman, 1990). In this study, community violence is limited to violent activity perpetrated by persons other than members of the adolescent's family. The operational definition of exposure to community violence is given by the adolescent's score on the Survey of Exposure to Community Violence.

Perceived Quality of Family Relationships

Perceived quality of family relationships is one of the independent variables in this study. It is related to adolescents' satisfaction with their

relationship to their parents and their perception of parental support. The operational definition of perceived quality of family relationships is the adolescent's score on the Family Functioning subscale of the Offer Self-Image Questionnaire-Revised (Offer, Ostrov, Howard, & Dolan, 1992).

Self

The self, as defined in constructivist self-development theory (McCann & Pearlman, 1990), is a hypothetical construct that is used to describe what individuals experience as the center of their psychological universe. It comprises (a) basic self capacities that function to maintain an inner sense of identity and positive self-esteem; (b) ego resources that regulate and enhance the individual's interactions with the outside world; (c) psychological needs that motivate behavior; and (d) cognitive schemas that are the beliefs, assumptions, and expectations used to interpret experience. The self develops as a result of both the individual's interactions with others and the individual's reflection upon those interactions.

Traumatic Event

The definition of traumatic event, which is utilized in this study, is derived from constructivist self-development theory (McCann & Pearlman, 1990). An event is traumatic if it satisfies the following criteria:

1. The event is sudden, unexpected, or would be considered reprehensible by the larger society.

2. The event exceeds the individual's perceived ability to meet its demands or challenges.

3. The event disrupts the individual's central psychological needs and related cognitive schemas.

The first criterion specifies that events, such as ongoing incest or community violence, may be considered traumatic even if individuals have come to expect their occurrence. Although expected, such events lie outside what most people would consider normal experience. The second and third criteria imply that an event that is traumatic for one person need not be traumatic for another. Whether an event is experienced as traumatic will be determined, in part by the nature of the event itself, but also by the individual's psychological and social resources, personal history, and social and cultural context. For example, supportive family relationships are associated with positive psychological outcomes in young people who have been exposed to negative life events (Cicchetti & Lynch, 1993; Rutter, 1987; Straus, 1994). One means by which supportive family relationships may contribute to an individual's ability to cope with adverse life events is the influence of such relationships on an individual's cognitive schemas. Janoff-Bulman (1989) found that victims of violence were more likely to question the nature of their world and themselves. Yet they were less likely to arrive at negative conclusions about themselves and their world if they had caring, supportive relationships with other people.

Violence

Holmes (1971) suggested that the differences between psychological violence and physical violence are sufficiently great that they should be treated

as separate concepts. To do psychological violence to another is to diminish that individual as a person, for example, by depriving that individual of his or her freedom, degrading him or her, or destroying his or her confidence. Such violence may be more injurious than physical violence even though it is generally less conspicuous. Physical violence involves the intentional use of physical force to cause harm, injury, suffering, or death to persons against their will. However, there are some acts that do not manifest elements of this definition but, nevertheless, may be considered cases of physical violence. For example, suicide may be thought of as a violent act although it involves voluntary action. Similarly, throwing a bomb into a crowd of people may be considered a violent act even if the bomb does not explode. In such a case, the clear intention to cause harm more than counterbalances the lack of success of the action. Physical violence very often results in psychological violence, as in the case of child abuse. However, physical violence does not necessarily lead to psychological violence, as is the case with a suicide that is intended to terminate an individual's suffering.

In this study, the definition of violence is restricted to violent or violence-related activities specified by items from the Survey of Exposure to Community Violence (Richters & Saltzman, 1990). Items from the survey that were included in this study referred to the following acts or events: (a) being chased by gangs or individuals; (b) drug activity; (c) forced entry into the adolescent's home; (d) arrest; (e) physical threat; (f) slapping, hitting, and punching; (g) beating and mugging; (h) weapons carrying; (i) hearing gunfire; (j) knife attack; (k) shooting;

and (l) killing. This study did not examine violence exclusively psychological in nature, such as belittlement and humiliation. However, adolescents frequently may be exposed to such violence, and, as previously described, such violence may result in greater injury than physical violence. Several categories of violence from the Survey of Exposure to Community Violence refer to events that, directly or indirectly, are related to criminal activities that are not explicitly violent. These categories include drug activity, arrest, weapons carrying, and hearing gunfire. Although these events do not necessarily involve the intentional use of physical force to cause harm, injury, suffering, or death to persons against their will, they are often associated with physical violence or, at least, the threat of it.

Delimitation and Limitations of the Study

The purpose of this study was delimited to a description of the association between exposure to community violence, characteristics of adolescents and their relationships to their families, and the adolescents' cognitive schemas for psychological needs. Because this was a correlational study, no inference can be made from its results that exposure to community violence has a direct influence on adolescents' cognitive schemas. A number of alternative explanations for an association between exposure to community violence and adolescents' cognitive schemas exist and would need to be ruled out before a causal claim could be justified. However, this study was not designed to rule out all these alternative explanations.

This study had several limitations. Its results may not generalize to all young adolescents in the population identified in this study because the research sample was not randomly selected from this population. Particularly, the results of this study may not generalize to those students who refuse participation in such studies or to those students whose parents refuse their permission for participation. The sample consisted of middle-school students who volunteered to participate in this study and whose parents gave permission for that participation. Volunteers may have represented a biased sample of the population of young adolescents who resided in or attended school in urban Orlando neighborhoods where the majority of the population was of lower socioeconomic status (SES). Judgment about the relevance of these results for populations of young adolescents other than the one assessed here must be made by the reader. On the basis of the degree of similarity between this study's description of its sample and setting and that of the sample and setting in which the reader is interested, he or she can determine whether generalization of these results is appropriate.

The use of a self-report instrument to assess adolescents' exposure to community violence represents another limitation of this study. Some participants may have tended either to underestimate or to overestimate their exposure to community violence. For such individuals, the Survey of Exposure to Community Violence would have measured a response set rather than actual exposure to community violence. Ideally, adolescents' reports of specific episodes of violence would be verified by cross-checking these episodes in

official documents. However, there exist no records of every episode of community violence to which adolescents are exposed.

Yet another limitation of this study was the use of an instrument to assess adolescents' cognitive schemas for which there is limited evidence of reliability and validity. Although this study included an investigation of the reliability and validity of the Self- and Others-Schemas Scale, reliability and validity data were collected from small samples. Furthermore, investigation of the construct validity of the instrument was limited to a comparison of the mean scale and subscale scores of two groups of adolescents who were expected to have very different cognitive schemas for their psychological needs. Support for the construct validity of the Self- and Others-Schemas Scale would have been strengthened by multiple sources of evidence that the instrument indeed measures cognitive schemas related to psychological needs.

Finally, it should be recognized that adolescents' cognitive schemas for psychological needs were the only dependent variables examined in this study. Psychological distress in the adolescents was not assessed. Consequently, it cannot be determined from the results of this study whether the participants who had more negative cognitive schemas were more distressed than were those who had more positive cognitive schemas.

Significance of the Study

A description of the relationship between exposure to community violence and adolescents' cognitive schemas that includes an account of how that relationship is moderated by certain characteristics of adolescents should

have both theoretical and practical significance. This study is intended to ascertain whether a theory of psychological trauma, namely, constructivist self-development theory (McCann & Pearlman, 1990), can generate substantiated predictions about the beliefs, assumptions, and expectations of adolescents who are exposed to community violence. Thus, the study should help to expand constructivist self-development theory by showing the extent to which the theory can be applied in a novel context, namely, adolescents' experiences with community violence. The practical value of this study is twofold. First, the study identifies a conceptual framework for understanding the cognitive schemas of adolescents who are exposed to community violence and, further, it will evaluate the utility of that framework. Second, a description of the cognitive schemas of adolescents who are exposed to community violence should have implications for the development of practical strategies for violence prevention and treatment programs.

As remarked earlier, this study was designed to expand constructivist self-development theory by applying it to a novel context. If the study demonstrates that constructivist self-development theory yields successful predictions about the cognitive schemas of adolescents who are exposed to recurrent violence in their communities, then it will show that the theory is more fruitful than heretofore realized. In addition, if this study shows the existence of a relationship that was predicted by constructivist self-development theory, then support for the theory itself is provided.

The application of constructivist self-development theory to the context of adolescents' exposure to community violence will have practical significance for educators who develop and implement violence prevention and treatment programs. Several reports of case studies of young people exposed to violence in their communities include the recommendation that the social and emotional consequences of such violence exposure be addressed by educators and clinicians (National Center for Clinical Infant Programs, 1992; Garbarino, Dubrow, Kostelny, & Pardo, 1992; Putnam & Trickett, 1993). Yet the consequences, or at least the correlates, of community violence exposure must be identified before they can be addressed. This study should contribute to the understanding of the psychological correlates of recurrent exposure to violence in the community. Previous research has documented the presence of distress symptoms in young people exposed to such violence (Durant, Cadenhead, Pendergrast, Slavens, & Linder, 1994; Fitzpatrick & Boldizar, 1993; Martinez & Richters, 1993; Osofsky, Wewers, Hann, & Fick, 1993). However, the relationships between exposure to community violence and young people's beliefs, assumptions, and expectations about themselves and their world have not been studied. This lack of knowledge seems particularly significant because several researchers have theorized that relationships exist between recurrent exposure to community violence and young people's schemas about themselves and their world (Cichetti & Lynch, 1993; Garbarino et al., 1992; Martinez & Richters, 1993). This study will determine whether constructivist self-development theory can provide a useful framework for understanding these

relationships. Hence, the application of constructivist self-development theory should contribute toward an understanding of the adaptive functioning of young people exposed to community violence. Richters and Martinez (1993b) concluded that recurrent exposure to community violence is not associated with adaptational failure in children after family stability and family safety are controlled. However, their conclusion is based on research that included only two measures of adaptation, namely, teacher ratings of school performance and parent ratings of clinically deviant behavior problems. Straus (1994) observed that young people may experience unseen effects of violence exposure even though they otherwise appear to be coping well. In this study, the adaptation of young adolescents who are exposed to community violence will be assessed in terms of unseen variables, that is, their assumptions, beliefs, and expectations about themselves and their world.

CHAPTER 2
REVIEW OF LITERATURE

For many adolescents in this nation, life in their communities has become increasingly violent. Between 1980 and 1994, the number of homicide victims, ages 12 to 17, increased 95% (Snyder et al., 1996). Adolescent homicide victims are disproportionately male and African American. In 1995, over 80% of the 3,069 adolescents murdered that year were boys, and over 50% were African American (Federal Bureau of Investigation [FBI], 1996).

Most murders of adolescents are committed with firearms. Between 1990 and 1994, firearms were used in 71% of the murders of African American adolescents and 54% of the murders of Caucasian adolescents (Snyder et al., 1996). For every person in the United States who is shot to death, nearly three others are wounded but not killed. The Centers for Disease Control and Prevention (CDC) estimated that 99,025 people were treated for firearm-related wounds in hospital emergency rooms between June 1, 1992, and May 31, 1993. Approximately 44% of those injured by gunshots were between the ages of 15 and 24 (Cheng, 1995).

Adolescents also frequently are victims of violent crime other than murder. In 1992, the rate of victimization by rape, robbery, and assault was 75.7 per 1,000 adolescents, ages 12 to 15. During that year, the rate of victimization by the same violent crimes was 77.9 for adolescents, ages 16 to 19. These

victimization rates were higher than those for any other age group (Gull et al., 1996).

Young people are often victimized by other young people. The Justice Department reported in 1992 that 55% of all crimes against 12- to 19-year-old youths were committed by persons in the same age group (Sexton, 1994). In 1994, 38% of murder victims, ages 12 to 14, were killed by juveniles, and 22% of murder victims, ages 15 to 17, were killed by juveniles. Although adults were responsible for most of the increase in violent crime that occurred between 1985 and 1994, juveniles accounted for 26% of that growth. Twenty-one percent of the increase in aggravated assaults that occurred during this time were due to juveniles, and, in addition, 48% of the increase in forcible rape. From 1985 to 1994, the number of juvenile homicide offenders tripled (Snyder et al., 1996).

Studies of Young People's Exposure to Community Violence

Young people may become involved in violence in their communities as perpetrators, victims, or witnesses. Researchers recently have begun to study young people's experience of being witness to, and victims of, violence in their communities. Several aspects of this exposure to community violence have been examined. First, the extent of young people's exposure to community violence has been assessed. Second, researchers have sought to determine which young people are at greatest risk of exposure to community violence. Third, attempts have been made to describe the psychological functioning of young people with exposure to community violence. Fourth, researchers have

begun to identify those factors that make young people more or less vulnerable to adverse psychological functioning associated with exposure to community violence.

The Extent of Young People's Exposure to Community Violence

The extent of young people's exposure to violence in their communities cannot be assessed by crime statistics alone. Many incidents of victimization are not reported to the police. Further, crime statistics do not indicate how many young people are affected by witnessing violent events in their communities. In an effort to understand better the impact of community violence on youths, researchers have begun to collect data on the frequency with which young people are exposed to such violence.

The CDC developed the Youth Risk Behavior Surveillance System to identify adolescents' health-risk behaviors, including violence-related actions. In 1995, a nationally representative sample of 10,904 students in grades 9 through 12 completed the school-based survey (Kann et al., 1996). One-fifth of these adolescents reported that they had carried a weapon during the previous month. Over 7% reported that they had carried a gun. In the year preceding the survey, 38.7% of the adolescents had been in a physical fight. Almost 5% of them had missed at least one day of school during the preceding month because they feared for their safety at school or while traveling to and from school.

In the National Adolescent Student Health Survey (CDC, 1989), 8th- and 10th-grade students were questioned about their experiences with victimization

in and out of school. Data were collected from a nationally representative sample of 11,419 students. Forty-nine percent of the boys and 28% of the girls reported that they had been in at least one physical fight the previous year. Thirty-four percent of the students reported that they had been physically threatened. Fourteen percent of the students reported that they had been robbed during the year. Nineteen percent of the girls reported that someone had tried to force them to have sex outside of school.

Most research on young people's exposure to community violence is conducted in urban areas with moderate-to-severe levels of violent crime. None of these urban studies included random sampling procedures. Nevertheless, a consistent finding of this research is that exposure of youths to violence in inner-city neighborhoods is high. Lorion and Saltzman (1993) reported on a survey of 170 racially heterogeneous fifth- and sixth-grade students from two schools in Washington, DC, neighborhoods with relatively high levels of violence. Almost four out of five students reported that they either had witnessed or been a victim of an incident involving severe violence (e.g., being shot at or attacked with a knife) or moderate violence (e.g., being beaten up or physically threatened). More than one in five students reported that they had been shot at, stabbed, or attacked with a gun or knife. Almost one in six students reported that they had witnessed a homicide.

Richters and Martinez (1993a) evaluated the extent of children's exposure to violence in a moderately violent Washington, DC, neighborhood. Participants in the study included 111 first- and second-grade students and 54

fifth- and sixth-grade students from one elementary school. The sample comprised almost equal numbers of boys and girls. Almost all (97%) of the students were African American. Data also were collected from a parent of each of the students in the sample. Both younger and older children were significantly more likely to report that they had witnessed violence directed toward another individual than they were to report that they themselves had been victimized. Sixty-one percent of the younger children and 72% of the older children reported that they had witnessed a violent incident. Victimization was reported by 19% of the younger children and 32% of the older children. Moderate agreement was found between boys and their parents regarding the boys' exposure to violence. There was little agreement between the parents' and their daughters' reports of the girls' exposure to community violence, however. Girls reported that they had witnessed and been victimized by violence more often than did their parents.

Osofsky et al. (1993) evaluated the extent of children's exposure to violence in a New Orleans neighborhood with a relatively severe level of violence. Their study's sample was composed of 53 African American children, ages 9 to 12, and a parent of each child. Unlike Richters and Martinez (1993a), Osofsky et al. found agreement between parents and their children regarding the children's level of exposure to violence. According to their parents, 26% of the children had witnessed a shooting, 19% had witnessed a stabbing, 72% had seen weapons used, 40% had seen a dead body, 49% had seen someone wounded, and over half the children had been victims of some form of violence.

Bell and Jenkins (1993) summarized two studies of exposure to community violence among African American youths in Chicago neighborhoods. In a survey of 563 students from three elementary schools in moderately violent neighborhoods, 26% of the students reported that they had witnessed a shooting and 30% reported that they had witnessed a stabbing. The sample in the second study included 1,000 students from two middle and four high schools in neighborhoods with moderate-to-severe levels of crime. Three out of four of these students had witnessed at least one robbery, stabbing, shooting, or killing. Almost half (47%) of the students reported that they had been victimized. Eleven percent of the students reported that someone had shot at them; 3% reported that they had been hit by a bullet; 17% reported that they had been threatened with a gun; 23% reported that they had been threatened with a knife.

Many of the victims and perpetrators of the violence witnessed by young people are known to them. Bell and Jenkins (1993) found that 50% of the victims of shootings witnessed by the middle- and high-school students in their study were either a classmate, friend, neighbor, or relative of the young person. In addition, these students were acquainted with the victims of 55% of the stabbings and 40% of the murders they had witnessed. Richters and Martinez (1993a) found that 62% of the victims of violence witnessed by the fifth- and sixth-grade students in their study were known to the children (family 13%, friends 38%, acquaintances 16%). The perpetrators of the violence witnessed

by the children also were known to them (family 21%, friends 25%, acquaintances 12%).

Thus, it appears that a substantial proportion of children and adolescents living in the United States are witnesses and victims of violence in their communities. In particular, young people who live in inner-city neighborhoods are likely to have been exposed to violence. The violence that inner-city youths experience is often of a lethal nature, such as shootings and stabbings. By contrast, many other young people from a cross section of communities in the United States are exposed to less severe forms of violence, such as physical threats, fighting, and exposure to weapons. Most of the violence incidents to which young people are exposed, as victims and witnesses, involve people known to them.

Young People With Increased Risk of Exposure to Community Violence

Researchers have identified several characteristics of young people, their environment, and their families that are associated with increased risk of exposure to community violence. As discussed in the preceding section of this chapter, young people who live in poor urban areas more frequently are witnesses and victims of community violence. Gladstein, Slater Rusonis, and Heald (1992) compared exposure to community violence in a group of lower SES, inner-city adolescents and a group of middle-to-upper class, suburban adolescents. The inner-city adolescents were significantly more likely to have witnessed violence, been victims of violence, and known victims of violence. Nevertheless, the middle-to-upper class youths were not isolated from violence.

For example, 17% of the adolescents from the upper SES group reported that they had been assaulted, and 9% reported that they had witnessed a stabbing. Singer, Anglin, Song, and Lunghofer (1995) also found that exposure to community violence, particularly of a severe nature, is most extensive among adolescents living in economically depressed urban neighborhoods. They surveyed 3,735 high school students from Cleveland, Denver, and a small city in Ohio. Adolescent boys from poor inner-city neighborhoods had the most exposure to violence of a severe nature. For example, one third of the boys, from economically depressed neighborhoods in the city of Cleveland, had been shot at or shot the previous year. Boys living in a poor area of the small city in Ohio also had substantial exposure to severe violence. More than one third of these boys had witnessed a shooting. The adolescents living in more affluent, suburban neighborhoods had the least exposure to community violence.

Thus, children living in economically depressed settings are at greater risk of exposure to community violence. Nevertheless, researchers have found considerable variation in young people's exposure to violence even within the same poor urban neighborhoods. Durant et al. (1994) examined the extent of violence exposure among 225 African American youths, ages 11 to 19, who lived in housing projects in Augusta, GA. These researchers identified age as a positive correlate of witnessing violence and victimization. In their study of inner-city Chicago youths, Bell and Jenkins (1993) also found that older adolescents were more likely to be victims of violence. However, the younger

adolescents in their study were as likely as older adolescents to report witnessing violence.

Gender sometimes is identified as a correlate of exposure to community violence. Fitzpatrick and Boldizar (1993) analyzed violence exposure among 221 African American young people in central-city housing communities of Birmingham, AL. Their study's sample included children and adolescents, ages 7 to 18. Boys reported more victimization than did girls. Yet the young women in the study were as likely to have witnessed violence as the young men. The finding that girls are less likely than boys to be victims of violence in the community but just as apt to witness violence has been replicated by some studies (Bell & Jenkins, 1993; Richters & Martinez, 1993a). However, in other studies boys are found both to witness and to be victimized by violence more frequently than are girls (Gladstein et al., 1992).

Children and adolescents whose families experience greater conflict may be at increased risk for exposure to violence in their communities. Bell and Jenkins (1993) found that elementary students who reported more frequent fighting in their families more often reported the witnessing of shootings and stabbings in their neighborhoods. Durant et al. (1994) and Osofsky et al. (1993) also reported an association between family conflict and exposure to community violence. However, in these latter two studies, the possibility was not ruled out that the young people's exposure to conflict within their own families accounted for their exposure to community violence.

It has been demonstrated that the use of violence and exposure to community violence among adolescents are related. Durant et al. (1994) found that adolescents who reported more witnessing of violence and victimization were more likely to report the carrying and use of weapons, the perpetration of assaults, and engagement in gang fights. Bell and Jenkins (1993) identified carrying a weapon as the strongest predictor of witnessing, victimization by, and the perpetration of violence. Wright, Sheley, and Smith (1992) theorized that adolescents in inner cities carry weapons as a result of prior victimization and the threat of violence (rather than as a means to achieve status). They surveyed 835 criminally active adolescents in six juvenile correctional facilities. Adolescents in the sample were asked why they carried guns. Self-protection was the most frequently cited reason for being armed. These adolescents were most likely to carry a gun when in a strange place or when they thought a gun was needed to protect themselves. They were least likely to carry a gun when in the company of friends who were themselves armed. In ecological models, the relationship between exposure to community violence and use of violence is hypothesized to be reciprocal (Garbarino et al., 1992). According to these models, exposure to violence increases the likelihood that adolescents will engage in violent acts and place themselves in situations in which further exposure to violence is likely to occur.

Crime statistics show that African American adolescents are more likely to be victims of homicide than are Caucasian adolescents. In 1995, there were 1,690 African American homicide victims between the ages of 13 and 19.

During the same year, 1,262 Caucasian adolescents in that age group were murdered (FBI, 1996). From their survey of a nationally representative sample of 10,904 high-school students, the CDC found that African American and Latino adolescents were more likely to feel unsafe at school or when traveling to and from school than were Caucasian adolescents. Latino adolescents were more likely to have carried a weapon to school than were Caucasian adolescents. African American and Latino girls were more likely than Caucasian girls to have done so. Latino adolescents were more likely to report that they had been threatened or injured with a weapon while on school property than were Caucasian adolescents. Latino and African American boys were more likely than Caucasian boys to report this type of exposure to violence (Kann et al., 1996).

These data show that African American and Latino adolescents have greater exposure to some types of community violence than do Caucasian adolescents. However, they do not indicate whether African American and Latino adolescents, living in economically depressed areas, have greater exposure to community violence than do Caucasian adolescents living in the same environment. Nor do these data show whether African American and Latino adolescents, living in more affluent settings, have greater exposure to community violence than do Caucasian adolescents from the same environment.

In summary, there are several variables associated with young people's exposure to community violence. Young people who live in poor

neighborhoods, particularly in the inner-city, witness and are victims of community violence more often than are young people living in more affluent settings. African American and Latino adolescents are more likely to be exposed to certain types of community violence than are Caucasian adolescents. Older children are more likely than younger children to be victims of violence in their communities. Similarly, older adolescents are more apt to be victims of community violence than are younger adolescents. Boys are more often victims of community violence than are girls. Although gender and age are associated with victimization by violence in the community, girls may witness as much violence as boys. Moreover, in urban neighborhoods, younger children may witness as much violence as older children, and, similarly, younger adolescents may witness as much violence as older adolescents. Young people of the same age and gender and who live in the same inner-city neighborhoods are not at equal risk of exposure to community violence. Young people who live in families where there is frequent fighting and young people who carry weapons and initiate fights are more likely to be exposed to violence in their communities.

Exposure to Community Violence and Young People's Psychological Functioning

Of particular interest to researchers is the impact of exposure to community violence on young people's psychological functioning. Posttraumatic Stress Disorder (PTSD) has been observed in children who witnessed or learned about the violent death of a fellow student at school. In a study on the effects of a discrete episode of community violence on children,

Pynoos et al. (1987) interviewed 159 children who attended an elementary school where a group of students had been exposed the previous month to sniper fire on the school playground. One child was killed and 13 other students were injured during the incident. The study's sample was randomly selected from 33 of 38 classrooms in the school. (Five teachers refused their class' participation in the study.) The sample was evenly distributed across boys and girls and African Americans and Latinos. Children in the sample had various levels of exposure to the violent event. Some had been on the playground during the sniper attack, whereas others were not at school that day. Mild PTSD symptoms were diagnosed in 22% of the sample. In a follow-up study 14 months after the sniper attack, 100 children were reinterviewed (Nader, Pynoos, Fairbanks, & Frederick, 1990). PTSD symptoms reported by the children were found to decrease over time. However, 74% of the students who had been on the playground during the sniper attack continued to experience PTSD symptoms. Schwarz and Kowalski (1991) interviewed 64 children who attended an elementary school in an upper-middle class neighborhood where an armed intruder had shot and killed one student and wounded five others. The study's sample included students whose parents requested psychological screening for themselves and their children. (Selection into this study compromised the validity of the findings.) Students were reinterviewed 8 to 14 months after the shootings. Criteria for a diagnosis of PTSD were met by 27% of the students.

Researchers also have sought to define the psychological responses of young people who are exposed to recurring violence in their communities. Young people who are exposed to relatively high levels of community violence are reported to experience more emotional distress and, specifically, more symptoms of depression and PTSD. Osofsky et al. (1993) identified a positive relationship between parent reports of their children's exposure to community violence and parent reports of distress symptoms in their children. Parents who reported that their children more frequently heard about or witnessed violent events described more distress symptoms in their children. In addition, an association between parent reports of family conflict and parent reports of distress symptoms in their children was identified. Because parents were not asked if a family member was involved in those acts of community violence to which their children were witness, Osofsky et al. could not rule out the possibility that children's distress symptoms actually were related only to exposure to violence involving family members.

Martinez and Richters (1993) included in their study of fifth- and sixth-grade students' exposure to community violence an assessment of the relationship of the children to the victims and perpetrators of violence. Distress symptoms reported by the children in this study were associated with both witnessing and victimization by violence involving persons known to the children (family, friends, and acquaintances). Exposure to violence involving only strangers to the children was not related to the children's reports of distress. Martinez and Richters also found an association between exposure to

community violence and self-reported distress in their sample of first- and second-grade students. However, the younger children were not asked if they know the victims or perpetrators of the violence to which they were exposed. Only the parents of younger boys agreed with their children about the level of distress experienced by their children. The parents of girls judged their daughters to be much less distressed than did the girls themselves. The lack of agreement between parents and their daughters about the girls' level of distress is consistent with their lack of agreement about the girls' level of exposure to community violence. A significant negative correlation between parents' and older boys' reports of the boys' level of distress was found. Martinez and Richters attributed this negative association to a tendency of some older boys to use denial and bravado as coping mechanisms. Boys who were exposed to considerable violence but reported few distress symptoms were more likely to be described by their parents as both distressed and boastful.

An increased number of PTSD symptoms among young people exposed to virtually chronic violence in their communities was reported by Fitzpatrick and Boldizar (1993). Of their sample of lower SES young people living in Birmingham, 27.1% met the criteria for a diagnosis of PTSD. An additional 61.3% of the sample reported some symptoms of PTSD (but not enough to warrant a diagnosis of PTSD). Witnessing violence and victimization by violence were found to predict PTSD symptoms in these young people. One of the symptoms of PTSD, described in the Diagnostic and Statistical Manual of Mental Disorders - Fourth Edition (American Psychiatric Association, 1994), is

the sense of a foreshortened future. Using the Hopelessness Scale for Children as a measure of negative expectations for the future, Durant et al. (1994) determined that adolescents exposed to a substantial level of violence in their communities are more likely to be generally pessimistic about their futures. In addition, Durant et al. found that adolescents who reported greater exposure to violence in their communities also reported more symptoms of depression.

Adaptive responses of young people to violence exposure also are described in the literature. Williams, Singh, and Singh (1994) assessed the actions of adolescents taken as a result of crime concerns. These researchers reanalyzed data that were collected in a 1986 survey of the safety practices of middle- and high-school students in South Atlantic City, NJ. The sample of 1,774 adolescents (83% of the original sample who completed the survey questionnaire) was 86% African American, 12% Caucasian, and 2% other. Adolescents who reported exposure to violence were found to be significantly more likely to report taking a variety of safety precautions. Those who reported that they had witnessed a crime were more likely to report carrying a whistle, refusing to walk alone at night, learning self defense, and carrying mace. Adolescents who reported victimization were more likely to report carrying mace and refusing to walk alone at night.

Richters and Martinez (1993b) cautioned against the conclusion that distress symptoms observed in young people living in chronically violent neighborhoods are necessarily a sign of maladjustment. They noted that

symptoms of distress may represent or precipitate either maladaptive or adaptive responses to violence exposure. Richters and Martinez assessed the adaptational success or failure of a group of children reporting extensive violence exposure and considerable distress. Their study's sample comprised 72 first- and second-grade African American students from the same elementary school in a low-income, moderately violent Washington, DC, neighborhood. The sample was evenly divided between boys and girls. The children's adaptational success or failure was determined from their scores on the Child Behavior Checklist - Parent Report (Achenbach & Edelbrook, 1983) and the Teacher Observation of Classroom Adaptation - Revised (Werthamer-Larsson, Kellam, Dolan, Brown, & Wheeler, 1990). The majority (54%) of the children were judged to be succeeding in both the academic and socio-emotional domains. Failure in one domain was observed in 26% of the children, and failure in both domains was observed in 20% of the children. Moreover, adaptational failure was found to be associated with instability and a lack of safety in children's homes but not with the level of children's exposure to community violence. Richters and Martinez concluded from their study's findings that adaptational failure tends to be the exception rather than the rule for children living in moderately violent urban environments. According to these researchers, many families, despite multiple disadvantages, are able to prevent violence in their surrounding communities from negatively influencing their children's development.

In summary, a substantial number of children who are exposed to an acute episode of community violence (i.e., a fatal shooting) report PTSD symptoms. These symptoms abate over time but are still present a year later in children who were directly exposed to the incident. Young people who are exposed to virtually chronic violence in their communities also report more symptoms of distress, including those associated with depression and PTSD. However, the presence of distress symptoms in young people who are exposed extensively to violence in their communities is not necessarily a sign of maladjustment. Distress may precipitate adaptive responses to violence. Indeed, young people who have been exposed to community violence are more likely to report taking a variety of reasonable safety precautions, such as refusing to walk alone at night. Although developmental damage is more likely to occur when children are exposed to multiple stressors in their environment (Garbarino et al., 1992), a relationship between recurrent exposure to community violence and adaptational success or failure in young people has not been established.

Moderators of the Relationship Between Young People's Exposure to Community Violence and Their Psychological Functioning

Researchers have determined that certain characteristics of an episode of violence, young people, and their families moderate the relationships between exposure to community violence and the psychological responses of young people. It has been demonstrated that the psychological response of young people to an acute episode of community violence varies according to their proximity to the violent incident. In their study of children exposed to a

sniper attack at school, Pynoos et al. (1987) found that children with greater proximity to the violent episode reported more PTSD symptoms. Moreover, the children who were directly exposed to sniper fire on their school playground were more likely to report certain types of symptoms. The symptoms more often reported by the directly exposed group of children included (a) recurrent intrusive images of the violent episode, (b) dreams of the sniper attack, (c) difficulty concentrating, and (d) emotional constriction. However, proximity to the violent episode was not identified as a link between exposure and the development of PTSD symptoms in a second study. Schwarz and Kowalski (1991) found that children who were in the immediate vicinity of a shooting were no more likely to develop PTSD symptoms than were other students at the school who were out of the range of fire. Differences in sampling method, the violent events, or characteristics of the school communities might account for the contradictory findings of the two studies.

Young people's familiarity with the victims and perpetrators of violence is a second characteristic of the episode itself that has been shown to moderate the association between psychological functioning and community violence exposure. As previously described in this review, Martinez and Richters (1993) found that children were more distressed by violence involving people known to them. Pynoos et al. (1987) found that children acquainted with the victim of a sniper shooting were more likely to develop PTSD symptoms regardless of their own proximity to the shooting. In their 14-months follow-up study of children's reactions to a sniper attack at school, Nader et al. (1990) discovered a rapid

decline in the number of PTSD symptoms reported by children who were not directly exposed to the shooting. However, those children who were not on the playground during the sniper attack but knew the victim continued to report more PTSD symptoms than their peers who neither were on the playground nor knew the victim.

Characteristics of young people that may moderate the relationship between their exposure to community violence and psychological functioning include their gender and age. Fitzpatrick and Boldizar (1993) found that girls who were victimized reported more PTSD symptoms than did boys who were victimized. These researchers hypothesized that victimization might be associated with more serious symptoms in girls because of the nature of victimization experienced by girls (i.e., sexual assault). Fear of sexual assault also might account for the finding that girls are more likely to report that they do not walk alone at night (Williams et al., 1994). Other researchers (Martinez & Richters, 1993; Pynoos et al., 1987) have found that preadolescent girls exposed to violence in their communities are no more likely to report symptoms of distress than are boys with similar levels of exposure.

Garbarino et al. (1992) theorized that age is an important determinant of young people's responses to recurring violence in their communities. However, only in one study (Fitzpatrick & Boldizar, 1993) has the influence of age on the relationship between distress and recurrent exposure to community violence been examined. In that study, age was found not to moderate the number of

PTSD symptoms reported by young people exposed to chronic violence in their communities.

Although it has not been established that recurrent exposure to community violence is related to later adaptational success or failure, it has been shown that children's attitudes toward their own future may moderate the relationship between exposure to multiple environmental stressors (including community violence) and children's subsequent adaptation. Wyman, Cowen, Work, and Kerley (1993) assessed children's adjustment, life stress, and future expectations on two occasions separated by a 2 1/2- to 3 1/2-year period. After controlling for the children's initial adjustment and for their life stress subsequent to the first assessment, children's positive expectations for their future were found to predict their adjustment at the time of the second assessment. Wyman et al. did not isolate community violence from other life stresses in their analyses, however, exposure to such violence was included in their assessment of children's life stresses. Moreover, the children in their study lived in inner-city neighborhoods characterized by poverty and violence.

Certain characteristics of families (e.g., cohesion, positive parent-child relationships) are associated with positive psychological outcomes in young people despite exposure to multiple stressors (Cicchetti & Lynch, 1993; Garbarino et al., 1992; Rutter, 1987; Straus, 1994). Straus hypothesized that families have the potential to protect adolescents from violence and, in addition, to provide them with the social and emotional resources necessary to cope with violence from which the family cannot shield them. Families with greater

advantages, such as the presence of two parents and the relative absence of stress, may be in a better position to offer protection to their children and to enable them to develop social and emotional resources. Support for this hypothesis can be found in two studies of young people's exposure to recurrent violence in their communities. Fitzpatrick and Boldizar (1993) found a stronger association between victimization and the presence of PTSD symptoms among young people who lived in homes with no father or stepfather. Martinez and Richters (1993) found that maternal education moderated the relationship between distress and exposure to community violence in their sample of inner-city children. Cicchetti and Lynch (1993) hypothesized that maternal education has an organizing influence on the family environment. Parents with more education may have more sources of support, economic and personal, to offer their children.

In summary, the relationship between young people's exposure to community violence and their psychological functioning varies according to characteristics of the violent episode, the young people, and their families. Children in greater proximity to an episode of community violence may evidence more distress than those with greater distance from the violence. Familiarity with the victims and perpetrators of community violence is associated with greater distress in young people. Adolescent girls who are victimized report more emotional distress than do adolescent boys. One possible explanation for the greater distress reported by adolescent girls who are victimized is that they are more likely to be victims of sexual assaults. Girls and

boys who are exposed to similar levels of nonsexual violence, such as a sniper attack, are equally likely to report symptoms of emotional distress. Better adjustment after exposure to multiple life stressors, including community violence, is observed in children who have more positive attitudes toward their future. Finally, recurrent exposure to community violence is associated with less distress among young people whose families have greater resources, such as two parents and a higher level of education attained by the mother.

Limitations of Exposure to Community Violence Research

A consistent finding of studies has been that young people, who are exposed to recurrent violence in their communities, report an increased number of distress symptoms. However, the correlational nature of this research does not establish claims that recurrent exposure to community violence causes emotional distress in young people. Violence is not distributed randomly across communities in the United States. Young people who are most likely to witness and be victimized by community violence are those living in poor inner-city neighborhoods. These young people are differentially exposed not only to community violence but also to other adverse conditions that include, but are not limited to, poverty, racism, physical and sexual abuse, poor health care, poor education, family disorganization, and estrangement from those socially provided capabilities and opportunities that make for personal empowerment. It is possible that one of these factors associated with recurrent exposure to community violence is the primary cause of the emotional distress observed in these young people. Yet another possibility is that these factors interact to

produce the heightened distress reported by young people exposed to recurrent violence in their communities. Research on the effects of such exposure is necessarily limited by the difficulty in identifying and organizing all the relevant data for study. As a consequence, the complex interactions that may produce the distress reported by young people with recurrent exposure to community violence cannot be identified. Richters and Martinez (1993b) articulated the position that, in general, the causal roles of risk factors in child development are poorly understood. A risk factor, such as recurrent exposure to community violence, may have a direct causal role on child development. On the other hand, such a factor may influence child development only in conjunction with other variables. Alternatively, the factor may be a marker for the presence of an unidentified factor with a causal role in development.

Even if the relationship between recurrent exposure to community violence and elevated distress in young people could not be attributed to some other factor or combination of factors, existing studies have not ruled out the possibility that distress is a cause rather than an effect of recurrent exposure to community violence. Martinez and Richters (1993) noted that children's distress symptoms may precede rather than follow exposure to community violence. Young people who are distressed may place themselves in situations wherein they are exposed to increased levels of community violence. Further, it is possible that young people who are distressed are more sensitive to violence and more readily perceive and identify violent events in their environment.

Certain characteristics of the procedures that have been used to measure young people's exposure to community violence and distress also limit the inferences that can be made about their relationship. In many studies, both young people's exposure to community violence and distress have been measured by self-report. As a consequence, the association that has been identified in these studies may be due to response sets. In other words, a positive correlation between reports of exposure to community violence and distress may have been found because of a tendency of some young people to exaggerate both exposure to community violence and distress and a tendency of other young people to deny or minimize both experiences. Several researchers (Martinez & Richters, 1993; Osofsky et al., 1993) attempted to circumvent this problem by using parents as informants about their children's exposure to community violence and experience of distress. However, Martinez and Richters concluded from the findings of their study that parent reports of their children's experiences are not necessarily reliable. Gladstein et al. (1992) indicated yet another problem with the measurement of exposure to community violence that limits the inferences that can be made from existing studies. Those terms included in the instruments that measure exposure to violence, such as "threatened with rape" and "had your life threatened" may be interpreted quite differently by individuals. The use of specific examples might help to clarify the terms used. However, the problem of varied interpretations of terms never can be fully overcome.

Summary of Research

Several conclusions may be drawn from the research on young people's exposure to community violence. First, a substantial number of young people, particularly those living in large urban areas, frequently witness and are victimized by violence in their communities. Second, young people who are exposed to community violence report more psychological distress, including more depression and more symptoms of PTSD. Third, certain characteristics of young people and their families are related to both a decreased risk of exposure to community violence and a lower level of distress associated with such exposure. Although several researchers (Cichetti & Lynch, 1993; Garbarino et al., 1992; Martinez & Richters, 1993) have theorized that a relationship exists between young people's exposure to recurrent violence in their communities and their beliefs about themselves and their worlds, this relationship has been examined only to a limited degree. Durant et al. (1994) determined that adolescents with greater exposure to community violence were more pessimistic about their futures. My study developed hypotheses, derived from constructivist-self development theory, about the relationship between recurrent exposure to community violence and adolescents' beliefs about themselves and their worlds. Constructivist-self development theory also was used to generate predictions about the ways in which this relationship is moderated.

Constructivist Self-Development Theory

McCann and Pearlman (1990) formulated constructivist-self development theory to explain adults' experience of and subsequent adaptation to traumatic events. Constructivist-self development theory may contribute toward an understanding of the experience of adolescents who are exposed to recurrent violence in their communities. Certainly, young people might be distressed but not traumatized by experiences with community violence. Nevertheless, it can be argued that a theory of trauma is appropriate for the study of young people's experience of community violence. In her clinical work with children exposed to a range of adverse life events (e.g., sexual molestation, kidnapping, animal bites), Terr (1983, 1990) observed a continuum of reactions from fright to psychic trauma. She suggested that trauma might be viewed best as a spectrum of conditions ranging from fright to more severe states depending upon how many of the individual's coping and defensive operations are compromised by the shock.

According to constructivist self-development theory, an experience is traumatic if it is sudden, unexpected, or non-normative, and, in addition, threatens the psychological core of the individual. This psychological core of the individual is understood to be the self. The self is a hypothetical construct that comprises (a) self capacities, (b) ego resources, (c) psychological needs, and (d) cognitive schemas related to psychological needs. Self capacities help the individual to maintain a sense of identity and positive self-esteem. The self capacities described in constructivist-self development theory are (a) the ability

to tolerate strong affect, (b) the ability to be alone, (c) the ability to calm oneself, and (d) the ability to regulate self-loathing. Ego resources are used to regulate and enhance the individual's interactions with the world and other people. These resources include such abilities as (a) empathy, (b) intelligence, (c) initiative, (d) the ability to take perspective, (e) the ability to foresee consequences, (f) the ability to establish mature relationships with others, (g) the ability to establish interpersonal boundaries, and (h) the ability to make self-protective judgments. Psychological needs motivate the individual's behavior. There are several psychological needs of individuals that are identified by constructivist self-development theory as particularly relevant for trauma survivors. First is the need to develop a frame of reference for understanding one's experiences. Important aspects of frame of reference include (a) attributions of causality, (b) hope, and (c) locus of control. Five other psychological needs identified in constructivist self-development theory as central to the individual are (a) safety, (b) trust, (c) esteem, (d) intimacy and (e) control.[1] Cognitive schemas are knowledge structures that are used by the individual to select and organize information. They guide the individual's attention to information and influence the individual's interpretation and recollection of information. Cognitive schemas related to the central psychological needs are the beliefs, assumptions, and expectations regarding those needs that the individual has. For example, an individual may hold the

[1] Control was later conceptualized as comprising needs for independence and power. Independence refers to the need to be in control of one's own actions and destiny. Power refers to the need to influence one's environment.

belief that most people are generally trustworthy and expect that people can be relied upon to follow through on their commitments most of the time. Individuals' experiences with the gratification and frustration of psychological needs shape their schemas about these needs. Cognitive schemas develop through the process of assimilation and accommodation. New experiences continually are incorporated, or assimilated, into existing schemas. When an experience is discrepant from an individual's existing schemas, the relevant schemas are modified so that the individual can make sense of the novel experience. This process of modification is termed accommodation.

A traumatic event threatens the self by exceeding the individual's perceived ability to cope with its demands. In other words, a traumatic experience overwhelms at least some of the self capacities and ego resources of the individual. In addition, a traumatic experience disrupts central psychological needs and disconfirms the individual's assumptions, beliefs, and expectations related to those needs. Trauma, consequently, forces an accommodation of schemas related to central psychological needs. The substantive importance of these needs to the individual makes the accommodation of the related schemas a painfully difficult process.

Traumatic events generally are associated with the shattering of existing positive schemas related to psychological needs. However, at times, traumatic experiences may reinforce negative schemas. When an individual has had a psychological need repeatedly frustrated, a traumatic experience is likely to confirm the negative schema associated with the frustrated need. For example,

people who have had the need for trust frustrated many times may interpret a traumatic event as further evidence that other people are unsupportive.

There is considerable variation among individuals as to which specific psychological needs and cognitive schemas will be affected by stressful events. A tenet of constructivist self-development theory is that those psychological needs that are most emotionally significant or salient to the individual are the most vulnerable to disruption by traumatic events. The relative salience of psychological needs is shaped by the individual's developmental history. For example, a need that has never been adequately satisfied may be particularly salient for an individual. In the event of a traumatic experience, this prominent need is likely to be further disrupted.

Individuals' development is influenced not only by events that are unique to the individuals but also by the social and cultural context in which their development occurs. According to constructivist self-development theory, individuals' SES, gender, and ethnicity are important aspects of their social and cultural contexts. These demographic variables are hypothesized to influence the relative significance of psychological needs and related schemas for individuals. For example, McCann and Pearlman (1990) described power as a need made salient to men during their socialization. Many men, they observe, experience depression after an experience with victimization if they are unable to reestablish a sense of power over their environment.

An individual who experiences disruption to a number of need-related schemas generally will be more distressed than an individual who experiences

disruption to only one schema. Someone with a more generalized negative schema also experiences more distress than someone whose negative schema is more circumscribed. For example, an individual who is assaulted and concludes that the world is not a safe place is likely to suffer more distress than another who concludes that unlit parking lots are not safe places. The extent of disruption to need-related schemas is influenced by the individual's developmental history and social and cultural context. Characteristics of the traumatic event itself also affect the extent to which psychological needs and schemas are disrupted.

Characteristics of the individual's social network of family and friends affect the individual's experiences of trauma in two important ways. First, the individual who has had positive relationships with emotionally significant others is more likely to have had important psychological needs satisfied. Consequently, such an individual is less likely to have needs that are vulnerable to disruption by adverse life events. Second, when an individual is traumatized, supportive relationships with others can facilitate a successful resolution of the trauma. In the context of supportive relationships, an individual more effectively can cope with the painful affect associated with trauma and reestablish positive beliefs and expectations that it is possible to have one's psychological needs met in the world.

In summary, within constructivist self-development theory, a traumatic experience threatens the psychological core, or self, of an individual. Two aspects of the self that are threatened, or disrupted, by a traumatic experience

are central psychological needs and related cognitive schemas, or the expectations and beliefs that certain psychological needs will be satisfied. Central psychological needs comprise frame of reference, safety, trust, esteem, intimacy, and control. Individuals usually experience trauma as a disruption to positive schemas related to psychological needs. However, individuals who have had their psychological needs repeatedly frustrated may experience a traumatic event as confirming negative schemas. The specific psychological needs and schemas of an individual that are likely to be disrupted during trauma vary according to the individual's developmental history and social and cultural context. For example, SES, gender, and ethnicity moderate the relationship between exposure to an aversive event and disruption to specific schemas. This relationship is also moderated by the presence of supportive relationships with other people. Individuals who have positive relationships with family and friends are less likely to experience lasting disruption to their psychological needs and related schemas following exposure to an aversive event.

CHAPTER 3
METHODOLOGY

This study had two purposes. One was to describe the assumptions, beliefs, and expectations of adolescents who are exposed to recurrent violence in their communities. A second purpose of this study was to identify variables that moderate the relationship between exposure to community violence and adolescents' cognitive schemas for understanding themselves and their world. A sample of middle-school students who lived or attended school in urban neighborhoods were surveyed to determine whether their level of exposure to community violence would predict their cognitive schemas related to the psychological needs for safety, trust, esteem, intimacy, and control. The influence of several social context variables on the relationship between adolescents' cognitive schemas and their community violence exposure also was examined. This chapter describes the participants, research instruments, data collection procedures, and methods of data analysis employed by this study.

Participants

Participants in this study were selected from a population of middle-school students who lived in the metropolitan area of Orlando, Florida. The population included young adolescents who resided in urban neighborhoods or attended urban schools, in both of which the median family income was below

that for the county in which Orlando is located. The city of Orlando, which has a population of 177,000, is situated in a metropolitan area with a population of 1,324,000. Within the city limits, the population is 27% African American, 63% Caucasian, 9% Latino, and 2% other races. The median family income in Orange county, where Orlando is located, is $34,670. In 1989, 15% of Orange county's adolescents, ages 12 through 17, lived below the poverty level. During the same time period, 25% of the adolescents, ages 12 through 17, who resided in Orlando lived below the poverty level (Bureau of the Census, 1992). In 1993, Orlando's rate of violent crime was 23 per 1,000 residents. Among 100 of the largest cities in the United States, Orlando ranked 15th in rate of violent crime (Morgan, Morgan, & Quitno, 1995). Between 1991 and 1994, the rate of violent juvenile crime grew faster in Orange county than anywhere else in the state of Florida (Griffin & Clark, 1997).

The study sample consisted of 118 middle-school students. All the participants in this study were paid volunteers. A majority of the participants in the study (n = 98, 83%) were attending a middle school located in an urban area of Orlando. The median income for families who lived in the neighborhoods surrounding the school was under $25,000. Approximately 39% of the children under the age of 18 who resided in these neighborhoods lived below the poverty level (Bureau of the Census, 1992). The population of the middle school from which participants were selected was 46% African American, 42% Caucasian, 10% Latino, and 2% other races. The remainder of the sample (17%) consisted of 20 students who resided in an urban housing

project of Winter Park, a community in the metropolitan area of Orlando. These students were attending a community-based program, the Esteem Teen program. The median family income for the neighborhood, in which the housing project was situated, was approximately $15,000 (Bureau of the Census, 1992).

All of the students enrolled in the Orlando middle school and 6 of the students from the Esteem Teen program were in the eighth grade (88%). The sample also included 7 sixth graders (6%) and 7 seventh graders (6%) from the Esteem Teen group.

Slightly more than half of the study participants were girls ($n = 66$, 55.9%); 52 boys (44.1%) participated in the study. The greatest number of students in the study were African American ($n = 57$, 48.3%). Forty-six of the students (39%) were Caucasian, and 15 students were Latino (12.7%).

The adolescents in the sample provided the following description of the highest level of education attained by either parent: some high school ($n = 8$, 6.8%); high school graduate ($n = 30$, 25.4%); some college ($n = 40$, 33.9%); and college graduate ($n = 40$, 33.9%). Due to the small number of adolescents in the sample whose parents had not graduated from high school, the educational levels, namely, some high school and high school graduate, were combined to form one level of parent education. Thus, the study sample was divided almost evenly among three levels of parent education: approximately one third of the adolescents had parents with a high school education or less; approximately one third of the adolescents had at least one parent who had attended some

college classes; and approximately one third of the adolescents had at least one parent who had graduated from college. The study sample included a larger percentage of adolescents with college-educated parents than were represented in the population from which the participants were selected. Students from the urban middle school whose parents had more education were more likely to return permission forms and, thus, were selected into the study. A detailed description of the sample, with crosstabulations of participants' ethnicity by their parents' education and by their gender is provided in Table 1.

Research Instruments

The young adolescents who participated in the study completed three research instruments. Descriptions of these instruments follow.

Survey of Exposure to Community Violence

Adolescents' exposure to community violence was assessed with questions from the Survey of Exposure to Community Violence (Richters & Saltzman, 1990). The study participants reported the frequency with which they had witnessed and been victimized by 12 forms of community violence: being chased by gangs or individuals; drug activity; forced entry into the young person's home; arrest; physical threat; slapping, hitting, and punching; beating and mugging; weapons carrying; hearing gunfire; knife attack; shooting; and killing.

Table 1

Description of the Sample

	Ethnic Group					
	African American		Caucasian		Latino	
Parents' Education/Gender	n	%	n	%	n	%
Level of parents' education						
Some high school	6	5.1	1	0.8	1	0.8
High school graduate	17	14.4	7	5.9	6	5.1
Some college	23	19.5	12	10.2	5	4.2
College graduate	11	9.3	26	22.0	3	2.5
Gender						
Girls	30	25.4	29	24.6	7	5.9
Boys	27	22.9	17	14.4	8	6.8

The study participants chose one of the following responses to questions concerning the frequency with which they had been exposed to stabbing, shooting, and killing: (a) never, (b) 1 time, (c) 2 times, (d) 3 times, (e) 4 times, and (f) 5 or more times. Alternative responses to questions concerning the frequency of exposure to less severe forms of violence were (a) never, (b) 1 or 2 times, (c) 3 or 4 times, (d) 5 or more times, (e) at least once a week, or (f) almost every day. The study participants also answered questions from the survey

concerning who perpetrated violent incidents to which they had been exposed and who were the victims of the violent incidents that they had witnessed. In this study, responses that identified family members as perpetrators of violence were eliminated from the community violence survey. Higher scores on the survey indicated greater frequency of exposure to community violence.

The Survey of Exposure to Community Violence has been used to assess community violence exposure in eight studies (Berman, Kurtines, Silverman, & Serafini, 1996; Durant et al., 1994; Fitzpatrick & Boldizar, 1993; Hinton-Nelson, Roberts, & Snyder, 1996; Lorion & Saltzman, 1993; Martinez & Richters, 1993; Osofsky et al., 1993; Richters & Martinez, 1993). Durant et al. reported a 1-week stability coefficient of .90 for the survey. Osofsky et al. and Richters and Martinez compared children's reports of violence exposure on the survey with crime statistics for the neighborhoods in which they lived. The children's reports were well within the boundaries of what would be expected considering the number and types of violent crimes listed in official police records. For example, in the study by Osofsky et al., 26.4% of their sample of 53 children reported that they had witnessed a shooting and 18.9% reported that they had witnessed a stabbing. The housing project, where the children lived, was located in the district of New Orleans with the greatest amount of violent crime. During a year-long period prior to the survey, there were, according to police records, 72 murders, 1,521 assaults, and 1,114 armed robberies in the district. In the study by Richters and Martinez, 43% of their sample of 51 fifth- and sixth-grade students reported that they had witnessed a mugging, 14%

reported that they had witnessed a shooting, 4% reported that they had witnessed a stabbing, and 4% of the students reported that they had witnessed a murder. These children lived in a moderately violent ward of Washington, DC. During a one-year period prior to the study, the following rates of crime for the ward were recorded by police: 106 homicides, 1,156 robberies, and 1,386 assaults per 100,000 population.

A pilot study was conducted to obtain estimates of the stability and internal consistency of young adolescents' responses to questions from the Survey of Exposure to Community Violence that were asked in this research. Twenty eighth-grade students, who attended the same urban Orlando middle school where most of the research study participants were enrolled, responded to the modified survey. Two weeks later, they answered the same survey questions. Data from the pilot study yielded a stability coefficient of .87 and an internal consistency coefficient of .84 for the modified survey.

Self- and Others-Schemas Scale

Adolescents' cognitive schemas for understanding themselves and their world were assessed with the Self- and Others-Schemas Scale. This research instrument was based upon some of the items of the TSI Belief Scale (Pearlman, McCann, & Johnson, 1990). The TSI Belief Scale was designed to evaluate the extent of disruption to the cognitive schemas of adult trauma survivors. No published data were available on the reliability or validity of TSI Belief Scale scores for a young adolescent population. I developed the Self- and Others-Schemas Scale for use with young adolescents. Items for the

research instrument have a 5-point Likert scale that ranges from strongly disagree to strongly agree. The research instrument was intended to assess cognitive schemas that are predicted by constructivist self-development theory to be disrupted in trauma. Higher scores on the Self- and Others-Schemas Scale and its subscales reflect more negative schemas for understanding oneself and others.

A pilot study was conducted to determine whether the Self- and Others-Schemas Scale would provide a valid and reliable assessment of young adolescents' cognitive schemas. This pilot study had three goals. Its first aim was to demonstrate the content validity of the Self- and Others-Schemas Scale. The second goal of the pilot study was to provide evidence for the construct validity of the research instrument and its subscales. The final goal of the pilot study was to obtain estimates of the reliability of scores achieved on the research instrument and its subscales.

Content validation of the Self- and Others-Schemas Scale. A content validation procedure was conducted to provide evidence that items from the Self- and Others-Schemas Scale represent cognitive schemas related to the psychological needs for safety, trust, esteem, intimacy, and control. The initial step in this procedure consisted of defining positive and negative schemas related to psychological needs for self-safety, other-safety, self-trust, other-trust, self-esteem, other-esteem, self-intimacy, other-intimacy, self-control, and other-control. In the next step of the content validation procedure, a panel of experts on psychological needs was selected. The panel of experts included a college

administrator with a Ph.D. in counselor education; a school psychologist with an Ed.D. in school psychology; and three school counselors, one with a Ph.D. and two with an M.Ed. degree in counselor education. In the next step of the procedure, these experts were presented the definitions of negative and positive schemas related to psychological needs and, in addition, a pool of 103 items. They were given the task of matching each item to the cognitive schema the item represented. (Both the definitions of schemas and the instructions for matching items to schemas that were given to the panel of experts are in Appendix A.) The experts independently performed the task of matching items to schemas. With 80 to 100% agreement, they correctly matched at least seven items from the item pool to each of 10 cognitive schemas. Eighteen items were eliminated from the item pool because fewer than four of the five experts correctly matched the items to the cognitive schemas the items represented. An additional 15 items were eliminated from the pool so that the subscales of the Self- and Others-Schemas Scale, corresponding to particular cognitive schemas, would consist of equal numbers of items. Each subscale of the Self- and Others-Schemas Scale was constructed from those seven items with the greatest amount of expert agreement concerning the schema the items represented.

Each of the seven items of the Self-Safety, Other-Safety, Self-Trust, Other-Trust, Self-Esteem, and Self-Control subscales had been matched to the appropriate schema by 100% of the experts. The Self-Intimacy and Other-Intimacy subscales included six items matched to the appropriate schema by

100% of the experts and one item appropriately matched by 80% of the experts. The Other-Control subscale comprised five items matched to the appropriate schema by 100% of the experts and two items appropriately matched by 80% of the experts. Finally, the Other-Esteem subscale contained seven items matched to the appropriate schema by 80% of the experts. These 10 subscales, each composed of seven items that had been matched to the appropriate schema by at least 80% of the panel of experts, were administered to participants in the next stages of the pilot study.

Construct validation of the Self- and Others-Schemas Scale. Evidence for the construct validity of the Self- and Others-Schemas Scale was assembled by contrasting the mean scores of two groups of young adolescents who, according to constructivist self-development theory, should differ on the scale. A normal group of young adolescents was composed of 20 eighth-grade students from a regular education class of a suburban middle school in Orlando. The contrasting group consisted of 20 young adolescents who were enrolled in emotionally handicapped (EH) classes. Eleven of the students from EH classes attended the same suburban middle school as did the adolescents in the contrasting group. Nine students from EH classes were enrolled at the same urban Orlando middle school as were most of the participants in the principal research study.

The participants in the construct validation study completed 10 subscales, namely, Self-Safety, Other-Safety, Self-Trust, Other-Trust, Self-Esteem, Other-Esteem, Self-Intimacy, Other-Intimacy, Self-Control, and Other-

Control. It was hypothesized that the students enrolled in EH classes would have more negative schemas for safety, trust, esteem, intimacy, and control than would the students from regular education classes. These hypotheses were derived from a tenet of constructivist self-development theory that negative schemas are associated with difficulties in psychological adaptation. The hypotheses that the mean scores on the Self- and Others-Schemas Scale and its subscales would be higher (indicating more negative schemas) for the students enrolled in EH classes were evaluated with one-tailed t tests. The overall error rate for the 11 tests was controlled at .05 by setting the α-level for each test at .005.

As can be seen in Table 2, the scores of students enrolled in EH classes reflected more negative schemas on all subscales of the Self- and Others-Schemas Scale except Self-Intimacy. Because evidence for the construct validity of the Self-Intimacy subscale was lacking, it was eliminated from the Self- and Others-Schemas Scale that was administered to participants in the principal research study.

Reliability of the Self- and Others-Schemas Scale. Estimates of the stability of responses to the Self- and Others-Schemas Scale and its subscales were obtained with a test-retest procedure. Participants in the reliability study included 20 students from an eighth-grade regular education class. These students attended the same urban Orlando middle school as did most of the participants in the principal research study. They completed the same 10

subscales as had participants in the construct validation study. Two weeks later, the participants in the reliability study responded to the same instrument.

Table 2

Differences Between Students from Regular Education and Emotionally Handicapped Classes on Self- and Others-Schemas Scale

	Regular education		EH		
Subscale	M	SD	M	SD	t
Self-Safety	15.10	2.77	22.95	4.02	-7.19***
Other-Safety	21.75	4.59	26.95	4.65	-3.56**
Self-Trust	14.65	4.39	21.25	4.81	-4.53***
Other-Trust	16.40	5.15	23.25	4.36	-4.54***
Self-Esteem	12.70	4.69	18.35	5.44	-3.52**
Other-Esteem	19.75	3.16	23.15	4.52	-2.76*
Self-Intimacy	16.35	5.51	18.60	4.70	-1.39
Other-Intimacy	11.90	3.30	19.10	5.11	-5.30***
Self-Control	15.40	4.14	20.75	4.12	-4.10***
Other-Control	17.25	4.45	22.85	4.25	-4.07***
Total scale	129.50	19.95	177.85	16.33	-8.39***

*$p < .005$. **$p < .001$. ***$p < .0001$.

The stability coefficients obtained for the Self- and Others-Schemas Scale and each of its subscales are shown in Table 3. This table also includes Cronbach alpha coefficients that were calculated to provide estimates of the internal consistency of the scale and each subscale. At least a moderate degree of reliability was associated with each subscale except Self-Control. Due to its lack of sufficient reliability, the Self-Control subscale was eliminated from the Self- and Others-Schemas Scale that was administered to participants in the principal research study.

Summary of the Self- and Others-Schemas Scale. Adolescents' cognitive schemas for understanding themselves and their world were assessed in this study with the Self- and Others-Schemas Scale. I developed this research instrument for use with a young adolescent population. Based upon some items from the TSI Belief Scale, its purpose was to assess cognitive schemas that are predicted in constructivist self-development theory to be disrupted in trauma. A pilot study was conducted to provide evidence for the content and construct validity of the research instrument and to obtain estimates of its reliability.

Evidence for the content validity of the Self- and Others-Schemas Scale was assembled by constructing the research instrument from items that had been matched to appropriate cognitive schemas by at least 80% of a panel of experts. Information about the construct validity of the scale and its subscales was collected by contrasting the mean scores of two groups of young adolescents who were predicted to differ on the scale. Twenty young

adolescents enrolled in regular education classes and 20 young adolescents enrolled in EH classes completed 10 subscales of the research instrument. The scores of the students in EH classes reflected more negative schemas on all subscales except Self-Intimacy. This subscale was eliminated from the Self- and Others-Schemas Scale. Reliability estimates for the research instrument and its subscales were obtained from a sample of 20 eighth-grade students who were enrolled in the same urban middle school as were most of the participants in the principal research study. A least a moderate degree of reliability was associated with each subscale except Self-Control. This subscale also was eliminated from the Self- and Others-Schemas Scale.

The Self- and Others-Schemas Scale (Appendix B), which was administered to the participants in the principal research study, was composed of eight subscales, namely, Self-Safety, Other-Safety, Self-Trust, Other-Trust, Self-Esteem, Other-Esteem, Other-Intimacy, and Other-Control. Total scale scores were obtained by summing these eight subscale scores. The validity data and reliability coefficients for the total scale that are listed in Tables 2 and 3 are based upon the sum of these eight subscales. The scores of two contrasting groups of adolescents differed in the expected manner on this total scale and, thus, provided evidence for its construct validity. The 2-week stability coefficient of .83 and internal consistency coefficient of .88, which were obtained for the total scale, indicated that it was associated with moderately high reliability.

Table 3

Reliability Coefficients for Self- and Others-Schemas Scale

Subscale	Test-retest reliability	Cronbach's α
Self-Safety	.77	.69
Other-Safety	.71	.76
Self-Trust	.80	.79
Other-Trust	.77	.79
Self-Esteem	.80	.80
Other-Esteem	.82	.73
Self-Intimacy	.70	.57
Other-Intimacy	.84	.79
Self-Control	.46	.67
Other-Control	.84	.70
Total scale	.83	.88

Family Functioning Subscale of the Offer Self-Image Questionnaire, Revised

Adolescents' perceptions of the quality of their family relationships was assessed with the Family Functioning subscale of the Offer Self-Image Questionnaire, Revised (OSIQ-R; Offer et al., 1992). Earlier editions of the instrument were named the Offer Self-Image Questionnaire for Adolescents

(OSIQ). Offer et al. reported that the OSIQ was administered to over 30,000 adolescents from 10 nations. The Family Functioning subscale of the OSIQ-R was designed to measure adolescents' feelings about and relationships with their parents. It comprises the same 19 items that composed the Family Relationships subscale of the OSIQ. Items have a 6-point Likert scale that ranges from describes me very well to does not describe me at all. Higher raw scores on the subscale reflect more negative perceptions of one's family relationships. Family Functioning subscale scores of boys and girls from a population of normal adolescents have not been found to differ significantly (Offer et al., 1981, 1992; Patton & Noller, 1994).

A 2-year stability coefficient of .63 for the Family Functioning subscale was obtained from a sample of 71 normal adolescents. Data from a sample of 241 girls, ages 13 through 15, yielded a Cronbach alpha coefficient of .88 for the subscale. A Cronbach alpha coefficient of .84 for the subscale was obtained from a sample of 241 boys, ages 13 through 15 (Offer et al., 1992).

There are several sources of evidence for the validity of the Family Functioning subscale (formerly named the Family Relationships subscale). First, scores on the Family Relationships subscale correlated significantly with scores on the Family Self subscale of the Tennessee Self-Concept Scale for a sample of 60 adolescents. Second, Family Relationships subscale scores of normal adolescents were found to be significantly different from those of emotionally disturbed adolescents and those of delinquent adolescents in several studies (Offer et al., 1981). Third, there was a significant correlation

between Family Relationships subscale scores and scores on the Children's Depression Scale in a sample of 216 adolescents. Fourth, scores on the subscale appear not to be affected seriously by a tendency to choose socially desirable responses. In the same sample of 216 adolescents, scores on the Family Relationships subscale were not significantly correlated with scores on a measure of social desirability, the Jacobson-Kellog Self Description Inventory. Finally, a factor analysis of the OSIQ scores of these 216 adolescents provided support for the Family Relationships subscale (Patton & Noller, 1994).

The study participants answered only those items from the OSIQ-R that composed the Family Functioning subscale. In other words, these items were administered in nonstandard order.

Data Collection

Permission for participation in the study was obtained from at least one parent or guardian of each study participant. (The consent forms provided for the parents of students at the urban middle school and the parents of adolescents in the Esteem Teen program are in Appendix C.) An informed consent script was read to all the adolescents who participated in the study. (The child assent scripts that were read to the students at the urban middle school and to the adolescents in the Esteem Teen program are in Appendix D.)

The Self- and Others-Schemas Scale, the Survey of Exposure to Community Violence, and the Family Functioning subscale of the OSIQ-R were administered to the study participants in classroom and small group settings. All items from the research instruments were read to the adolescents so that

those with reading difficulties could participate in the study. I administered the research instruments to all participants. Data were collected from the urban middle school students in the spring of 1996 and from members of the Esteem Teen program in the summer of 1996.

Data Analysis

This study assessed the extent to which constructivist self-development theory could generate successful predictions about the cognitive schemas of adolescents who were exposed to community violence. Several models, derived from this theory, that depicted relationships between adolescents' cognitive schemas, their exposure to community violence, and several social context variables were evaluated by multiple regression analysis.

Each theoretical model that was tested included 1 dependent and 13 independent variables. The dependent variable in the first model was the total score on the Self- and Others-Schemas Scale, which measured the set of cognitive schemas related to psychological needs. Each of the remaining models included, as a dependent variable, a subscale score from the Self- and Others-Schemas Scale, which measured a cognitive schema related to a distinct psychological need (e.g., self-safety). Independent variables in each of the theoretical models comprised exposure to community violence, perceived quality of family relationships, level of parents' education, gender, ethnicity, and the interaction of exposure to community violence with each of the other primary independent variables. Exposure to community violence was the score on the Survey of Exposure to Community Violence. Perceived quality of family

relationships was the raw score on the Family Functioning subscale of the OSIQ-R. Level of parents' education was the highest level of education attained by either parent of an adolescent. It was coded with two dummy variables. The independent variable, education 1, was coded 1 for adolescents whose parents had a high school education or less. Education 1 was coded 0 for adolescents with at least one parent who had some college education, and it was coded 0 for those with at least one parent who had graduated from a 4-year college. The independent variable, education 2, was coded 1 for adolescents with at least one parent who had some college education. Education 2 was coded 0 for adolescents whose parents had a high school education or less, and it was coded 0 for those with at least one parent who had graduated from a 4-year college. The independent variable, gender, was coded 0 for boys and 1 for girls. Ethnicity was coded with two dummy variables. The independent variable, African American, was coded 1 for African American adolescents and 0 for Caucasian and Latino adolescents. The independent variable, Caucasian, was coded 1 for Caucasian adolescents and 0 for African American and Latino adolescents. Interaction terms in the models included Exposure to Community Violence x Perceived Quality of Family Relationships, Exposure to Community Violence x Education 1, Exposure to Community Violence x Education 2, Exposure to Community Violence x Gender, Exposure to Community Violence x African American, and Exposure to Community Violence x Caucasian. To illustrate, following is the hypothesized model for the prediction of an adolescent's Self-Safety subscale score.

$$E(Y) = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \beta_7X_7 + \beta_8X_1X_2 + \beta_9X_1X_3$$

$$+ \beta_{10}X_1X_4 + \beta_{11}X_1X_5 + \beta_{12}X_1X_6 + \beta_{13}X_1X_7 \quad (1)$$

where Y = the adolescent's score on the Self-Safety subscale of the Self- and Others-Schemas Scale;

X_1 = the adolescent's score on the Survey of Exposure to Community Violence;

X_2 = the adolescent's score on the Family Functioning subscale of the OSIQ-R;

X_3 = 0 if the adolescent has at least one parent with some college education, 0 if the adolescent has at least one parent with a degree from a 4-year college, 1 if the adolescent's parents have a high school education or less.

X_4 = 0 if the adolescent's parents have a high school education or less, 0 if the adolescent has at least one parent with a degree from a 4-year college, 1 if the adolescent has at least one parent with some college education.

X_5 = 0 if the adolescent is a boy, 1 if the adolescent is a girl;

X_6 = 0 if the adolescent is Caucasian or Latino, 1 if the adolescent is African American; and

X_7 = 0 if the adolescent is African American or Latino, 1 if the adolescent is Caucasian.

This study's principal research hypothesis represented a set of hypotheses that proposed that exposure to community violence, perceived quality of family relationships, level of parents' education, gender, ethnicity, and the interaction of exposure to community violence with each of the other independent variables would predict the set of cognitive schemas related to psychological needs (i.e., total score on the Self- and Others-Schemas Scale) and individual cognitive schemas related to distinct psychological needs (e.g., self-safety). This set of hypotheses were evaluated by assessing the utility of each model for predicting adolescents' cognitive schemas from the set of independent variables. The set of null hypotheses, H_o: $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = \beta_7 = \beta_8 = \beta_9 = \beta_{10} = \beta_{11} = \beta_{12} = \beta_{13} = 0$, were tested against the set of research hypotheses, H_a: at least one $\beta \neq 0$, at the .05 significance level with the global F test.

The first subset of research hypotheses in this study proposed that exposure to community violence would be more strongly associated with the presence of negative cognitive schemas for safety, trust, esteem, intimacy, and control among adolescents with fewer positive perceptions of their family relationships, with the other variables in the hypothesized regression model held constant. In other words, this subset of hypotheses stated that the slope of the relationship between adolescents' exposure to community violence and cognitive schemas would increase as their family relationships became more negative, while the other variables in the model were controlled. One-tailed t

statistics were used to test, at the .05 significance level, the set of null hypotheses, H_o: $\beta_8 = 0$, against the set of research hypotheses, H_a: $\beta_8 > 0$.

The second subset of research hypotheses proposed that the relationship between adolescents' exposure to community violence and cognitive schemas for their psychological needs would differ according to their parents' level of education, while the other variables in the hypothesized regression model were controlled. The evaluation of this subset of research hypotheses consisted of comparisons, between each of the three levels of parent education, of the slope of the relationship between exposure to community violence and cognitive schemas. First, a set of research hypotheses were evaluated that proposed that the slope of the relationship between exposure to community violence and cognitive schemas would differ for adolescents whose parents had a high school education or less and adolescents who had at least one parent with a college degree, with the other variables in the hypothesized regression model controlled. Two-tailed t statistics were used to test the set of null hypotheses, H_o: $\beta_9 = 0$, against the set of research hypotheses, H_a: $\beta_9 \neq 0$, at the .05 significance level. Second, a set of research hypotheses were evaluated that proposed that the slope of the relationship between exposure to community violence and cognitive schemas would differ for adolescents who had at least one parent with some college education and adolescents who had at least one parent with a college degree, while the other variables in the model were controlled. Two-tailed t statistics

were used to test the set of null hypotheses, H_o: $\beta_{10} = 0$, against the set of research hypotheses, H_a: $\beta_{10} \neq 0$, at the .05 significance level. Third, a set of research hypotheses were evaluated that proposed that the slope of the relationship between exposure to community violence and cognitive schemas would differ for adolescents whose parents had a high school education or less and adolescents who had at least one parent with some college education, with the other variables in the model controlled. Two tailed t statistics were used to test the set of null hypotheses, H_o: $\beta_9 - \beta_{10} = 0$, against the set of research hypotheses, H_a: $\beta_9 - \beta_{10} \neq 0$, at the .05 significance level.

The third subset of research hypotheses proposed that the relationship between adolescents' exposure to community violence and cognitive schemas for their psychological needs would differ according to the adolescents' gender, the other variables in the hypothesized regression model being controlled. That is, the third subset of hypotheses stated that the slope of the relationship between adolescents' exposure to community violence and their cognitive schemas would differ for girls and boys with the other variables in the model held constant. Two-tailed t statistics were used to test the set of null hypotheses, H_o: $\beta_{11} = 0$, against the set of research hypotheses, H_a: $\beta_{11} \neq 0$, at the .05 significance level.

Finally, the fourth subset of research hypotheses proposed that the relationship between adolescents' exposure to community violence and cognitive schemas for their psychological needs would differ according to the

adolescents' ethnicity, while the other variables in the regression model were controlled. The evaluation of this subset of research hypotheses entailed comparisons of the slope of the relationship between exposure to community violence and cognitive schemas for African American and Latino adolescents, Caucasian and Latino adolescents, and African American and Caucasian adolescents. First, a set of research hypotheses were evaluated that proposed that the slope of the relationship between exposure to community violence and cognitive schemas would differ for African American and Latino adolescents, with the other variables in the hypothesized regression model controlled. Two-tailed t statistics were used to test the set of null hypotheses, H_o: $\beta_{12} = 0$, against the set of research hypotheses, H_a: $\beta_{12} \neq 0$, at the .05 significance level. Second, a set of research hypotheses were evaluated that proposed that the slope of the relationship between exposure to community violence and cognitive schemas would differ for Caucasian and Latino adolescents, while the other variables in the model were controlled. Two-tailed t statistics were used to test the set of null hypotheses, H_o: $\beta_{13} = 0$, against the set of research hypotheses, H_a: $\beta_{13} \neq 0$, at the .05 significance level. Third, a set of research hypotheses were evaluated that proposed that the slope of the relationship between exposure to community violence and cognitive schemas would differ for African American and Caucasian adolescents, with the other variables in the model controlled. Two tailed t statistics were used to test the set of null

hypotheses, H_o: $\beta_{12} - \beta_{13} = 0$, against the set of research hypotheses, H_a: $\beta_{12} - \beta_{13} \neq 0$, at the .05 significance level.

CHAPTER 4
RESULTS

One purpose of this study was to describe the assumptions, beliefs, and expectations of adolescents who are exposed to recurrent violence in their communities. The specific assumptions, beliefs, and expectations evaluated were adolescents' cognitive schemas for the psychological needs of safety, trust, esteem, intimacy, and control. Another purpose of this study was to identify social context variables that moderate the relationship between adolescents' exposure to community violence and their cognitive schemas for psychological needs. A sample of middle-school students who lived or attended school in urban neighborhoods were questioned about their exposure to community violence and about their assumptions, beliefs, and expectations related to safety, trust, esteem, intimacy, and control. This chapter initially describes these adolescents' reports of their community violence exposure. The remainder of the chapter presents the results of regression analyses that were done in order to test this study's hypotheses. These results portray the relationship between adolescents' community violence exposure, their cognitive schemas, and several social context variables.

Study Participants' Exposure to Community Violence

As can be seen in Table 4, the majority of the adolescents who participated in the study reported at least one exposure to each category of

Table 4

Adolescents' Reports of Community Violence Exposure

	Witness		Victim	
Category of violence	n	%	n	%
Chased by gangs or individuals	75	63.6	50	42.4
Drug sale or use	89	75.4	67	56.8
Forced entry into family home	17	14.4	37	31.4
Arrest	109	92.4	31	26.3
Physical threat	96	81.4	66	55.9
Slapping, hitting, punching	107	90.7	86	72.9
Beating or mugging	75	63.6	24	20.3
Carrying weapons	94	79.7	--	--
Sound of gunfire	85	72.0	--	--
Knife attack	41	34.8	12	10.2
Shooting	33	28.0	1	0.8
Killing	9	7.6	--	--

Note. Cell entries are the numbers and percentages of study participants who reported at least one exposure to a particular category of violence. Empty cells reflect the fact that certain types of victimization are either impossible to report or meaningless.

community violence with the exceptions of forced entry into family home, knife attack, shooting, and killing. Slightly more than one third of the adolescents reported having witnessed a knife attack, and a little over a quarter of the sample reported having witnessed a shooting.

Most of the adolescents' exposure to violence was limited to witnessing it. Nevertheless, they reported considerable victimization by violence. More than half of the adolescents reported that they had been asked to use illegal drugs; threatened with physical harm; and slapped, hit, or punched.

The majority of the study participants reported fewer than five exposures to any one category of community violence. Yet approximately one third to one half of these adolescents described frequent exposure to several categories of violence (see Table 5). For example, almost 40% of the adolescents reported that they had seen, on five or more occasions, someone carrying a weapon. Over 40% of the adolescents reported having heard the sound of gunfire on five or more occasions.

Multiple Regression Analyses

This section includes the results from multiple regression analyses that were used to test the study's hypotheses. These analyses consisted of the evaluation of nine dependent variables, namely, the set of cognitive schemas related to psychological needs and those cognitive schemas related to the distinct psychological needs of self-safety, other-safety, self-trust, other-trust, self-esteem, other-esteem, other-intimacy, and other-control. Total score on the Self- and Others-Schemas Scale and the scores on its eight subscales represented the dependent variables. Independent variables, which were assessed, comprised exposure to community violence, perceived quality of family relationships, level of parents' education, gender, ethnicity, and the interaction of exposure to community violence with each of the other primary

Table 5

Adolescents' Reports of Frequent Exposure to Community Violence

	Witness		Victim	
Category of violence	n	%	n	%
Chased by gangs or individuals	28	23.7	11	9.3
Drug sale or use	59	50.0	25	21.2
Forced entry into family home	1	0.8	1	0.8
Arrest	63	53.4	3	2.5
Physical threat	40	33.9	17	14.4
Slapping, hitting, punching	68	57.6	41	34.8
Beating or mugging	29	24.6	3	2.5
Carrying weapons	47	39.8	--	--
Sound of gunfire	51	43.2	--	--
Knife attack	2	1.7	0	0
Shooting	2	1.7	0	0
Killing	0	0	--	--

Note. Cell entries are the numbers and percentages of study participants who reported 5 or more exposures to a category of violence. Empty cells reflect the fact that certain types of victimization are either impossible to report or meaningless.

independent variables. Exposure to community violence was the score on the Survey of Exposure to Community Violence. Perceived quality of family relationships was the raw score on the Family Functioning subscale of the OSIQ-R. Level of parents' education was the highest level of education attained

by either parent of an adolescent. It was coded with two dummy variables. The independent variable, education 1, was coded 1 for adolescents whose parents had a high school education or less. Education 1 was coded 0 for adolescents with at least one parent who had some college education, and it was coded 0 for those with at least one parent who had graduated from a 4-year college. The independent variable, education 2, was coded 1 for adolescents with at least one parent who had some college education. Education 2 was coded 0 for adolescents whose parents had a high school education or less, and it was coded 0 for those with at least one parent who had graduated from a 4-year college. Gender was coded 0 for boys and 1 for girls. Ethnicity was coded with two dummy variables. The independent variable, African American, was coded 1 for African American students and 0 for Caucasian and Latino students. The independent variable, Caucasian, was coded 1 for Caucasian students and 0 for African American and Latino students.

Two adolescents in the sample did not complete the Familial Functioning subscale of the OSIQ-R. None of the scores of these adolescents could be used in the regression analyses. Two other adolescents failed to complete the Self- and Others-Schemas Scale. Total scale scores were not computed for these two adolescents. The analyses included only the scores from subscales on which every item was answered. Table 6 presents the descriptive statistics associated with those scores that were included in the regression analyses.

Table 6

Descriptive Statistics for Scores Included in Regression Analyses

Instrument	N	M	SD
Survey of Exposure to Community Violence[a]	116	23.77	14.52
OSIQ-R Family Functioning Subscale[b]	116	52.03	17.10
Self- and Others-Schemas Scale[c]	114	150.56	18.07
Self-Safety Subscale[d]	116	19.51	3.67
Other-Safety Subscale[d]	116	25.54	3.88
Self-Trust Subscale[d]	116	16.25	3.84
Other-Trust Subscale[d]	114	20.77	4.40
Self-Esteem Subscale[d]	116	14.39	4.69
Other-Esteem Subscale[d]	115	20.17	3.41
Other-Intimacy Subscale[d]	115	14.38	3.17
Other-Control Subscale[d]	116	19.85	3.44

[a]Scores may range from 0 to 105. Higher scores reflect greater exposure to community violence. [b]Scores may range from 19 to 114. Higher scores reflect more negative perceptions of the quality of family relationships. [c]Scores may range from 56 to 280. Higher scores reflect more negative schemas for psychological needs. [d]Scores may range from 7 to 35. Higher scores reflect more negative schemas for psychological needs.

Set of Cognitive Schemas Related to Psychological Needs

The regression model that was hypothesized to predict adolescents' total scores on the Self- and Others-Schemas Scale included the following independent variables: exposure to community violence, perceived quality of

family relationships, level of parents' education, gender, ethnicity, and the interaction of exposure to community violence with each of the other independent variables. These independent variables predicted a significant proportion of the variance in adolescents' total scale scores, F (13, 100) = 11.43, p = .0000. However, none of the tests associated with the interaction terms in the hypothesized model were significant (see Table 7). Evaluation of the research hypotheses was based upon the results of two tests in addition to those listed in the table. First, the slope of the relationship between exposure to community violence and total scale score did not differ significantly for adolescents whose parents had a high school education or less and those adolescents who had at least one parent with some college education, when the other variables in the model were controlled, t (100) = - 0.42, p = .68. Second, this slope did not differ significantly for African American and Caucasian adolescents, t (100) = - 0.70, p = .49. Thus, neither perceived quality of family relationships, level of parents' education, gender, nor ethnicity moderated a relationship between adolescents' exposure to community violence and their total scale scores.

In order to determine if the primary independent variables of exposure to community violence, perceived quality of family relationships, level of parents' education, gender, and ethnicity predicted adolescents' total scale scores, a reduced regression model, in which all interaction terms were eliminated, was evaluated. A summary of this reduced model is presented in Table 8. The evaluation of the reduced model also comprised two tests in addition to those

Table 7

Hypothesized Regression Model for Predicting Total Scale Scores

Variable	B	SE B	t
Exposure	0.63	0.39	1.60
Family	0.64	0.16	4.08*
Education 1[a]	8.34	7.65	1.09
Education 2[a]	2.50	6.11	0.41
Gender[b]	- 3.28	5.09	- 0.65
African American[c]	2.33	8.26	0.28
Caucasian[c]	0.07	8.74	0.00
Exposure X Family	0.00	0.01	- 0.42
Exposure X Education 1[a]	- 0.23	0.32	- 0.73
Exposure X Education 2[a]	- 0.14	0.28	- 0.49
Exposure X Gender[b]	0.16	0.19	0.81
Exposure X African American[c]	- 0.19	0.25	- 0.77
Exposure X Caucasian[c]	- 0.04	0.29	- 0.14

Note. Adjusted $R^2 = .55$.
[a]Parent education coding: Education 1 = 1 for high school or less and 0 for some college and college graduate. Education 2 = 1 for some college and 0 for high school or less and college graduate. [b]Gender coding: 1 = girl, 0 = boy. [c]Ethnicity coding: African American = 1 for African Americans and 0 for Caucasians and Latinos. Caucasian = 1 for Caucasians and 0 for African Americans and Latinos.
*$p < .0001$.

listed in the table. There was no significant difference in the total scale scores of adolescents whose parents had a high school education or less and those of adolescents who had at least one parent with some college education, when

Table 8

Reduced Regression Model for Predicting Total Scale Scores

Variable	B	SE B	t
Exposure	0.29	0.11	2.68*
Family	0.58	0.09	6.28**
Education 1[a]	3.06	3.35	0.91
Education 2[a]	0.99	3.03	0.33
Gender[b]	0.34	2.51	0.13
African American[c]	- 4.10	3.55	- 1.15
Caucasian[c]	- 3.36	3.84	- 0.88

Note. Adjusted R^2 = .55.
[a]Parent education coding: Education 1 = 1 for high school or less and 0 for some college and college graduate. Education 2 = 1 for some college and 0 for high school or less and college graduate. [b]Gender coding: 1 = girl, 0 = boy. [c]Ethnicity coding: African American = 1 for African Americans and 0 for Caucasians and Latinos. Caucasian = 1 for Caucasians and 0 for African Americans and Latinos.
*$p < .01$. **$p < .0000$.

the other independent variables in the model were held constant, $t(106) = 0.67$, $p = .51$. Moreover, there was no significant difference in the total scale scores of African American and Caucasian adolescents, $t(106) = -0.28$, $p = .78$.

With the other variables in the reduced model controlled, the adolescents' total scale scores were related both to their exposure to community violence and to their perceptions of the quality of their family relationships. The set of schemas for psychological needs was more negative among the adolescents who had greater exposure to community violence and those with less positive perceptions of their family relationships.

The independent variables in the reduced regression model explained a significant proportion of the variance in adolescents' total scale scores, F (7, 106) = 20.67, p = .0000. The interaction terms in the hypothesized model did not account for a significant increase in this variance, F (6, 100) = 0.85, p > .05.

Cognitive Schemas for Self-Safety

Exposure to community violence, perceived quality of family relationships, level of parents' education, gender, ethnicity, and the interaction of exposure to community violence with each of these other independent variables were hypothesized also to predict adolescents' self-safety schemas. The hypothesized model accounted for a significant proportion of the variance in Self-Safety subscale scores, F (13, 102) = 5.21, p = .0000. Yet no interaction terms in the model were related significantly to adolescents' self-safety schemas (see Table 9). Evaluation of the research hypotheses was based upon the results of two tests in addition to those listed in the table. First, the slope of the relationship between exposure to community violence and self-safety schemas did not differ significantly for adolescents whose parents had a high school education or less and those adolescents who had a parent with some college education, with the other variables in the model held constant, t (102) = - 0.06, p = .95. Second, the slope of this relationship did not differ significantly for African American and Caucasian adolescents, t (102) = - 0.07, p = .95. Hence, neither perceived quality of family relationships, level of parents' education, gender, nor ethnicity moderated a relationship between adolescents' exposure to community violence and their schemas for self-safety.

Table 9

Hypothesized Regression Model for Predicting Self-Safety Subscale Scores

Variable	B	SE B	t
Exposure	0.07	0.10	0.77
Family	0.02	0.04	0.60
Education 1[a]	2.35	1.89	1.25
Education 2[a]	0.20	1.52	0.13
Gender[b]	1.26	1.26	1.00
African American[c]	- 0.07	2.04	- 0.04
Caucasian[c]	- 0.32	2.16	- 0.15
Exposure X Family	0.00	0.00	0.28
Exposure X Education 1[a]	0.00	0.08	0.02
Exposure X Education 2[a]	0.01	0.07	0.07
Exposure X Gender[b]	0.02	0.05	0.50
Exposure X African American[c]	- 0.03	0.06	- 0.47
Exposure X Caucasian[c]	- 0.03	0.07	- 0.45

Note. Adjusted $R^2 = .32$.
[a]Parent education coding: Education 1 = 1 for high school or less and 0 for some college and college graduate. Education 2 = 1 for some college and 0 for high school or less and college graduate. [b]Gender coding: 1 = girl, 0 = boy. [c]Ethnicity coding: African American = 1 for African Americans and 0 for Caucasians and Latinos. Caucasian = 1 for Caucasians and 0 for African Americans and Latinos.

Once again, because the interaction terms in the hypothesized regression model failed to contribute to the prediction of the adolescents' schemas, a reduced regression model was evaluated. This model is summarized in Table 10. With the other variables in the reduced model

Table 10

Reduced Regression Model for Predicting Self-Safety Subscale Scores

Variable	B	SE B	t
Exposure	0.09	0.03	3.40**
Family	0.03	0.02	1.42
Education 1[a]	2.32	0.81	2.87*
Education 2[a]	0.33	0.73	0.46
Gender[b]	1.80	0.60	2.99*
African American[c]	- 0.96	0.86	- 1.12
Caucasian[c]	- 1.21	0.93	- 1.30

Note. Adjusted $R^2 = .36$.
[a]Parent education coding: Education 1 = 1 for high school or less and 0 for some college and college graduate. Education 2 = 1 for some college and 0 for high school or less and college graduate. [b]Gender coding: 1 = girl, 0 = boy. [c]Ethnicity coding: African American = 1 for African Americans and 0 for Caucasians and Latinos. Caucasian = 1 for Caucasians and 0 for African Americans and Latinos.
*$p < .005$. **$p < .001$.

controlled, adolescents' self-safety schemas were related to their exposure to community violence, to their parents' level of education, and to their own gender. The self-safety schemas of adolescents whose parents had a high school education or less differed significantly, not only from those of adolescents with a parent who had graduated from college, but also from those of adolescents who had a parent with some college education, $t(108) = 2.67$, $p = .01$.

With the other variables in the reduced model held constant, those most likely to have negative beliefs and expectations about their own safety were

adolescents with greater exposure to community violence, adolescents whose parents had a high school education or less, and girls. It can be noted that the self-safety schemas of African American and Caucasian adolescents did not differ significantly, when the other variables in the model were held constant, t (108) = 0.38, p = .70.

The reduced regression model accounted for a significant proportion of the variance in adolescents' Self-Safety subscale scores, F (7, 108) = 10.11, p = .0000. The inclusion of the interaction terms in the hypothesized regression model did not produce a significant increase in the proportion of explained variance in Self-Safety subscale scores, F (6, 102) = 0.09, $p > .05$.

Cognitive Schemas for Other-Safety

A summary of the regression analysis for the variables that were hypothesized to predict adolescents' schemas about the safety of their friends and family is presented in Table 11. The set of independent variables in the hypothesized model was not related to a significant proportion of the variance in adolescents' scores on the Other-Safety subscale, F (13, 102) = 1.40, p = .17.

A reduced regression model was evaluated to determine if adolescents' other-safety schemas were related to their exposure to community violence, perceived quality of family relationships, parents' level of education, and their own gender and ethnicity. The set of independent variables in this reduced model failed likewise to predict a significant proportion of the variance in the other-safety schemas of adolescents, F (7, 108) = 1.94, p = . 07.

Table 11

Hypothesized Regression Model for Predicting Other-Safety Subscale Scores

Variable	B	SE B	t
Exposure	0.15	0.12	1.20
Family	0.00	0.05	0.07
Education 1[a]	- 0.17	2.37	- 0.07
Education 2[a]	1.33	1.90	0.70
Gender[b]	1.07	1.58	0.68
African American[c]	- 2.32	2.56	- 0.91
Caucasian[c]	- 1.77	2.71	- 0.65
Exposure X Family	0.00	0.00	- 0.93
Exposure X Education 1[a]	- 0.01	0.10	- 0.11
Exposure X Education 2[a]	- 0.07	0.09	- 0.77
Exposure X Gender[b]	0.04	0.06	0.74
Exposure X African American[c]	0.07	0.08	0.91
Exposure X Caucasian[c]	0.07	0.09	0.79

Note. Adjusted $R^2 = .04$.
[a]Parent education coding: Education 1 = 1 for high school or less and 0 for some college and college graduate. Education 2 = 1 for some college and 0 for high school or less and college graduate. [b]Gender coding: 1 = girl, 0 = boy. [c]Ethnicity coding: African American = 1 for African Americans and 0 for Caucasians and Latinos. Caucasian = 1 for Caucasians and 0 for African Americans and Latinos.

Cognitive Schemas for Self-Trust

Exposure to community violence, perceived quality of family relationships, level of parents' education, gender, ethnicity, and the interaction of exposure to community violence with each of the other independent variables

also were hypothesized to predict adolescents' self-trust schemas. An examination of the residuals associated with the regression of Self-Trust subscale scores on the set of independent variables revealed that the studentized residual value of one observation was greater than 4. This outlier score was eliminated, and the data were reanalyzed.

The independent variables in the hypothesized model predicted a significant proportion of the variance in adolescents' Self-Trust subscale scores, F (13, 101) = 8.66, p = .0000. A summary of this model is presented in Table 12. With the other variables in the hypothesized model held constant, the slope of the relationship between exposure to community violence and self-trust schemas differed significantly for adolescents who had at least one parent with some college education, in comparison with adolescents whose parents had a high school education or less, t (101) = - 2.21, p = .03. Exposure to community violence was associated with a decrease in positive schemas for self-trust among adolescents who had a parent with some college education, whereas there was virtually no association between such exposure and the self-trust schemas of adolescents whose parents had a high school education or less. Level of parents' education was the only variable found to moderate the relationship between adolescents' exposure to community violence and their schemas for self-trust. The relationship between exposure to community violence and self-trust schemas did not differ significantly for African American and Caucasian adolescents, when the other variables in the model were controlled, t (101) = 1.03, p = .30.

Table 12

Hypothesized Regression Model for Predicting Self-Trust Subscale Scores

Variable	B	SE B	t
Exposure	0.09	0.08	1.09
Family	0.12	0.03	3.69**
Education 1[a]	3.94	1.62	2.43*
Education 2[a]	0.34	1.30	0.26
Gender[b]	0.05	1.08	0.04
African American[c]	- 0.84	1.75	- 0.48
Caucasian[c]	0.19	1.86	0.10
Exposure X Family	0.00	0.00	- 0.30
Exposure X Education 1[a]	- 0.09	0.07	- 1.37
Exposure X Education 2[a]	0.01	0.06	0.18
Exposure X Gender[b]	0.02	0.04	0.49
Exposure X African American[c]	- 0.02	0.05	- 0.31
Exposure X Caucasian[c]	- 0.06	0.06	- 1.03

Note. Adjusted $R^2 = .47$.
[a]Parent education coding: Education 1 = 1 for high school or less and 0 for some college and college graduate. Education 2 = 1 for some college and 0 for high school or less and college graduate. [b]Gender coding: 1 = girl, 0 = boy. [c]Ethnicity coding: African American = 1 for African Americans and 0 for Caucasians and Latinos. Caucasian = 1 for Caucasians and 0 for African Americans and Latinos.
*$p < .05$. **$p < .0005$.

A reduced regression model was evaluated to determine if self-trust schemas were related to perceived quality of family relationships, gender, or

ethnicity. The significant interaction of exposure to community violence with level of parents' education was retained in this model, but all other interactions were eliminated. Table 13 summarizes the reduced model for predicting adolescents' self-trust schemas. It can be noted that the self-trust schemas of African American and Caucasian adolescents did not differ significantly, when the other variables in the reduced model were controlled, t (105) = 0.03, p = .98.

With the other variables in the reduced model held constant, self-trust schemas were related to perceived quality of family relationships and to the interaction of exposure to community violence with level of parents' education. Adolescents with more negative perceptions of their family relationships had less positive self-trust schemas. Once again, the slope of the relationship between exposure to community violence and self-trust schemas was found to be different for the adolescents whose parents had a high school education or less, in comparison with those adolescents who had at least one parent with some college education, t (105) = - 2.47, p = .02. Exposure to community violence was associated with a decrease in positive schemas for self-trust among adolescents who had a parent with some college education but was associated with a slight increase in positive schemas for self-trust among adolescents whose parents had a high school education or less, when the other variables in the reduced model were controlled. The association between exposure to community violence and schemas for self-trust among adolescents who had a parent with some college education was stronger than that observed for adolescents whose parents had a high school education or less.

Table 13

Reduced Regression Model for Predicting Self-Trust Subscale Scores

Variable	B	SE B	t
Exposure	0.04	0.05	0.88
Family	0.11	0.02	5.88**
Education 1[a]	3.55	1.32	2.69*
Education 2[a]	0.09	1.18	0.07
Gender[b]	0.47	0.53	0.88
African American[c]	- 1.38	0.78	- 1.76
Caucasian[c]	- 1.36	0.86	- 1.58
Exposure X Education 1[a]	- 0.08	0.05	- 1.58
Exposure X Education 2[a]	0.03	0.05	0.50

Note. Adjusted $R^2 = .48$

[a]Parent education coding: Education 1 = 1 for high school or less and 0 for some college and college graduate. Education 2 = 1 for some college and 0 for high school or less and college graduate. [b]Gender coding: 1 = girl, 0 = boy. [c]Ethnicity coding: African American = 1 for African Americans and 0 for Caucasians and Latinos. Caucasian = 1 for Caucasians and 0 for African Americans and Latinos.

*$p < .01$. **$p < .0000$.

The reduced regression model accounted for a significant proportion of the variance in adolescents' Self-Trust subscale scores, F (9, 105) = 12.58, p =.0000. The additional interaction terms in the hypothesized model did not predict a significant increase in this variance, F (6, 101) = 0.29, $p > .05$.

Cognitive Schemas for Other-Trust

Table 14 summarizes the hypothesized regression model for predicting adolescents' schemas for trusting other people. Evaluation of the research

Table 14

Hypothesized Regression Model for Predicting Other-Trust Subscale Scores

Variable	B	SE B	t
Exposure	0.12	0.11	1.06
Family	0.05	0.04	1.12
Education 1[a]	2.64	2.16	1.22
Education 2[a]	0.70	1.73	0.41
Gender[b]	0.39	1.44	0.27
African American[c]	2.06	2.33	0.88
Caucasian[c]	- 0.95	2.47	- 0.36
Exposure X Family	0.00	0.00	0.80
Exposure X Education 1[a]	- 0.09	0.09	- 1.03
Exposure X Education 2[a]	- 0.03	0.08	- 0.33
Exposure X Gender[b]	- 0.05	0.05	- 0.85
Exposure X African American[c]	- 0.08	0.07	- 1.14
Exposure X Caucasian[c]	- 0.01	0.08	- 0.08

Note. Adjusted $R^2 = .39$.
[a]Parent education coding: Education 1 = 1 for high school or less and 0 for some college and college graduate. Education 2 = 1 for some college and 0 for high school or less and college graduate. [b]Gender coding: 1 = girl, 0 = boy. [c]Ethnicity coding: African American = 1 for African Americans and 0 for Caucasians and Latinos. Caucasian = 1 for Caucasians and 0 for African Americans and Latinos.

hypotheses was based upon the results of two tests in addition to those listed in the table. First, the slope of the relationship between exposure to community violence and other-trust schemas did not differ significantly for adolescents

whose parents had a high school education or less and those adolescents who had a parent with some college education, with the other variables in the model controlled, t (100) = - 1.14, p = .26. Second, this slope did not differ significantly for African American and Caucasian adolescents, t (100) = - 1.21, p = .23.

The set of independent variables in the hypothesized model was related significantly to the adolescents' other-trust schemas, F (13, 100) = 6.49, p = .0000. Yet no interaction term predicted a significant proportion of the variance in other-trust schemas when all other independent variables in the model were controlled. In other words, neither perceived quality of family relationships, level of parents' education, gender, nor ethnicity moderated a relationship between adolescents' exposure to community violence and their other-trust schemas.

Because all tests of the hypothesized interactions were insignificant, a reduced regression model for predicting other-trust schemas from the primary independent variables was evaluated (see Table 15). Both exposure to community violence and perceived quality of family relationships were related to adolescents' other-trust schemas, when the other variables in the reduced model were controlled.

Adolescents with greater exposure to community violence and adolescents with more negative perceptions about their family relationships had more negative beliefs and expectations about trusting other people. It can be noted that the other-trust schemas of adolescents whose parents had a high school education or less did not differ significantly from those of adolescents

Table 15

Reduced Regression Model for Predicting Other-Trust Subscale Scores

Variable	B	SE B	t
Exposure	0.09	0.03	2.79*
Family	0.08	0.03	3.02**
Education 1[a]	0.52	0.94	0.55
Education 2[a]	0.43	0.85	0.50
Gender[b]	-0.74	0.71	-1.05
African American[c]	-0.48	1.00	-0.48
Caucasian[c]	-1.89	1.08	-1.75

Note. Adjusted $R^2 = .40$.
[a]Parent education coding: Education 1 = 1 for high school or less and 0 for some college and college graduate. Education 2 = 1 for some college and 0 for high school or less and college graduate. [b]Gender coding: 1 = girl, 0 = boy. [c]Ethnicity coding: African American = 1 for African Americans and 0 for Caucasians and Latinos. Caucasian = 1 for Caucasians and 0 for African Americans and Latinos.
*$p < .01$. **$p < .005$.

who had a parent with some college education, with all other variables in the model held constant, t (106) = 0.11, $p = .91$. Moreover, the other-trust schemas of African American and Caucasian adolescents did not differ significantly, t (106) = 1.86, $p = .07$.

The primary independent variables accounted for a significant proportion of the variance in adolescents' Other-Trust subscale scores, F (7, 106) = 11.72, $p = .0000$. The inclusion of the interaction terms in the hypothesized model did not increase the proportion of explained variance, F (6, 100) = 0.66, $p > .05$.

Cognitive Schemas for Self-Esteem

Adolescents' self-esteem schemas also were hypothesized to be predicted from the set of variables that included exposure to community violence, perceived quality of family relationships, level of parents' education, gender, ethnicity, and the interaction of exposure to community violence with each of the other independent variables. The plot of the residuals associated with this regression model had a pattern that indicated the variance in Self-Esteem subscale scores was not constant throughout the range of values of the independent variables. In an attempt to correct this violation of one of the assumptions of the multiple regression procedure, a logarithmic transformation of the self-esteem variable was substituted in the model. The pattern of residuals associated with the transformed model indicated that the assumption of homogeneous conditional variances was satisfied. One adolescent's score was an outlier on plots of the residuals of the transformed Self-Esteem subscale scores and was removed from the analysis.

The transformed model that predicted the log of Self-Esteem subscale scores is presented in Table 16. No tests of the hypotheses that interaction terms would predict adolescents' self-esteem schemas were significant. With the other independent variables controlled, the slope of the relationship between exposure to community violence and self-esteem schemas did not differ significantly for the adolescents whose parents had a high school education or less and those adolescents who had a parent with some college education, $t(101) = -0.30$, $p = .76$. Moreover, the slope of this relationship did

Table 16

Complete Regression Model for Predicting Log (Self-Esteem Subscale Scores)

Variable	B	SE B	t
Exposure	0.00	0.00	1.07
Family	0.01	0.00	4.50*
Education 1[a]	0.01	0.07	0.06
Education 2[a]	- 0.02	0.06	- 0.41
Gender[b]	- 0.06	0.05	- 1.17
African American[c]	0.05	0.08	0.66
Caucasian[c]	0.13	0.08	1.54
Exposure X Family	0.00	0.00	- 1.27
Exposure X Education 1[a]	0.00	0.00	0.26
Exposure X Education 2[a]	0.00	0.00	0.52
Exposure X Gender[b]	0.00	0.00	0.88
Exposure X African American[c]	0.00	0.00	- 1.40
Exposure X Caucasian[c]	0.00	0.00	- 0.84

Note. Adjusted $R^2 = .31$.
[a]Parent education coding: Education 1 = 1 for high school or less and 0 for some college and college graduate. Education 2 = 1 for some college and 0 for high school or less and college graduate. [b]Gender coding: 1 = girl, 0 = boy. [c]Ethnicity coding: African American = 1 for African Americans and 0 for Caucasians and Latinos. Caucasian = 1 for Caucasians and 0 for African Americans and Latinos.
*$p = .0000$.

not differ significantly for African American and Caucasian adolescents, t (102) = - 0.44, $p = .66$. Hence, any relationship between adolescents' exposure to community violence and their self-esteem schemas was moderated neither by

their perceptions of the quality of their family relationships, by their parents' level of education, nor by their own gender or ethnicity. Nonetheless, the transformed model accounted for a significant proportion of the variance in the log of Self-Esteem subscale scores, F (13, 101) = 5.00, p = .0000.

Because the dependent variable was not related significantly to any interaction terms, a reduced model for predicting adolescents' self-esteem schemas was evaluated. The residuals associated with this reduced model also assumed a pattern that indicated the conditional variances of Self-Esteem subscale scores were not homogeneous across all levels of the independent variables. However, a logarithmic transformation of the Self-Esteem subscale scores appeared to reduce considerably this heteroscedasticity. One adolescent's score also was an outlier on the residual plots associated with this reduced model and was removed from the analysis.

Table 17 summarizes the reduced model that predicted the log of the dependent variable, self-esteem schemas. With the other independent variables in the reduced model held constant, perceived quality of family relationships and ethnicity were related to the log of Self-Esteem subscale scores. A test of the hypothesis that, with the other variables in the model controlled, self-esteem schemas would differ for African American and Caucasian adolescents was significant, t (107) = - 3.71, p = .001.

With the other variables in the reduced model controlled, those adolescents who had more positive perceptions of their family relationships had more positive beliefs and expectations regarding their self-esteem. In addition,

Table 17

Reduced Regression Model for Predicting Log (Self-Esteem Subscale Scores)

Variable	B	SE B	t
Exposure	0.00	0.00	- 0.87
Family	0.01	0.00	5.79*
Education 1[a]	0.00	0.03	0.05
Education 2[a]	0.01	0.03	0.37
Gender[b]	- 0.02	0.02	- 0.64
African American[c]	- 0.05	0.03	- 1.47
Caucasian[c]	0.05	0.04	1.26

Note. Adjusted $R^2 = .30$.
[a]Parent education coding: Education 1 = 1 for high school or less and 0 for some college and college graduate. Education 2 = 1 for some college and 0 for high school or less and college graduate. [b]Gender coding: 1 = girl, 0 = boy. [c]Ethnicity coding: African American = 1 for African Americans and 0 for Caucasians and Latinos. Caucasian = 1 for Caucasians and 0 for African Americans and Latinos.
*$p = .0000$.

the self-esteem schemas of African American adolescents were more positive than those held by Caucasian adolescents. It can be noted that the self-esteem schemas of adolescents whose parents had a high school education or less did not differ significantly from those of adolescents with a parent who had some college education, with the other variables in the reduced model held constant, t (107) = - 0.308, $p = .76$.

The independent variables in the reduced regression model predicted a significant amount of variance in the transformed dependent variable, F (7, 107)

= 8.10, p = .0000. The set of hypothesized interaction terms was not associated with a significant increase in predicted variance, F (6, 101) = 1.25, p > .05.

Cognitive Schemas for Other-Esteem

Table 18 summarizes the analysis of the regression of adolescents' other-esteem schemas on exposure to community violence, perceived quality of family relationships, level of parents' education, gender, ethnicity, and the interaction of exposure to community violence with each of the other independent variables. The set of independent variables in the hypothesized model accounted for a significant proportion of the variance in adolescents' schemas for their esteem of others, F (13, 101) = 3.46, p = .001. A test of the hypothesis that, with the other variables in the model controlled, the slope of the relationship between exposure to community violence and other-esteem schemas would differ for African American and Caucasian adolescents was significant, t (101) = - 3.20, p = .002. Exposure to community violence was associated with an increase in negative schemas for esteem of others among Caucasian adolescents but was associated with a decrease in negative schemas for esteem of others among African American adolescents. Ethnicity was the only variable found to moderate the relationship between adolescents' exposure to community violence and their other-esteem schemas. The slope of the relationship between exposure to community violence and other-esteem schemas did not differ significantly for the adolescents whose parents had a high school education or less and those adolescents with a parent who had

Table 18

Hypothesized Regression Model for Predicting Other-Esteem Subscale Scores

Variable	B	SE B	t
Exposure	- 0.04	0.10	- 0.43
Family	0.07	0.04	1.80
Education 1[a]	- 1.36	1.89	- 0.72
Education 2[a]	- 1.41	1.51	- 0.93
Gender[b]	- 2.29	1.26	- 1.83
African American[c]	3.54	2.04	1.74
Caucasian[c]	0.26	2.16	0.12
Exposure X Family	0.00	0.00	0.37
Exposure X Education 1[a]	0.00	0.08	- 0.03
Exposure X Education 2[a]	0.02	0.07	0.22
Exposure X Gender[b]	0.05	0.05	1.09
Exposure X African American[c]	- 0.08	0.06	- 1.37
Exposure X Caucasian[c]	0.09	0.07	1.20

Note. Adjusted $R^2 = .22$.
[a]Parent education coding: Education 1 = 1 for high school or less and 0 for some college and college graduate. Education 2 = 1 for some college and 0 for high school or less and college graduate. [b]Gender coding: 1 = girl, 0 = boy. [c]Ethnicity coding: African American = 1 for African Americans and 0 for Caucasians and Latinos. Caucasian = 1 for Caucasians and 0 for African Americans and Latinos.

some college education, when the other variables in the model were controlled, $t(101) = -0.33$, $p = .75$.

A reduced model was evaluated in order to determine whether perceived quality of family relationships, level of parents' education, or gender was

predictive of adolescents' other-esteem schemas (see Table 19). The reduced model included the primary independent variables and the interaction of exposure to community violence with ethnicity. With the other variables in the reduced model controlled, perceived quality of family relationships was related to adolescents' other-esteem schemas. Adolescents with less positive perceptions of their family relationships had more negative schemas for their esteem of others. The slope of the relationship between exposure to community violence and other-esteem schemas differed significantly for African American and Caucasian adolescents, with the other variables in the reduced model controlled, t (105) = - 4.08, p = .0001. Exposure to community violence was associated with an increase in negative schemas for esteem of others among Caucasian adolescents but was associated with a decrease in negative schemas for esteem of others among African American adolescents. It can be noted that the other-esteem schemas of adolescents whose parents had a high school education or less did not differ significantly from those of adolescents who had a parent with some college education, t (105) = - 0.58, p = .56.

The reduced regression model accounted for a significant proportion of the variance in adolescents' other-esteem schemas, F (9, 105) = 4.93, p = .0000. The additional interaction terms in the hypothesized model were not associated with a significant increase in the proportion of explained variance in these schemas, F (6, 101) = 0.26, p > .05.

Table 19

Reduced Regression Model for Predicting Other-Esteem Subscale Scores

Variable	B	SE B	t
Exposure	0.01	0.05	0.23
Family	0.08	0.02	3.56*
Education 1[a]	- 1.46	0.85	- 1.73
Education 2[a]	- 1.01	0.74	- 1.35
Gender[b]	- 1.12	0.62	- 1.81
African American[c]	3.30	1.87	1.76
Caucasian[c]	- 0.34	1.85	- 0.18
Exposure X African American[c]	- 0.08	0.06	- 1.42
Exposure X Caucasian[c]	0.11	0.06	1.74

Note. Adjusted $R^2 = .24$.
[a]Parent education coding: Education 1 = 1 for high school or less and 0 for some college and college graduate. Education 2 = 1 for some college and 0 for high school or less and college graduate. [b]Gender coding: 1 = girl, 0 = boy. [c]Ethnicity coding: African American = 1 for African Americans and 0 for Caucasians and Latinos. Caucasian = 1 for Caucasians and 0 for African Americans and Latinos.
*$p < .001$.

Cognitive Schemas for Other-Intimacy

Table 20 summarizes the hypothesized model for predicting adolescents' beliefs and expectations regarding their intimate relationships with other people. Evaluation of the research hypotheses was based upon the results of two tests in addition to those listed in the table. First, the slope of the relationship between exposure to community violence and other-intimacy schemas did not differ significantly for the adolescents whose parents had a

Table 20

Hypothesized Regression Model for Predicting Other-Intimacy Subscale Scores

Variable	B	SE B	t
Exposure	0.04	0.09	0.48
Family	0.09	0.04	2.45*
Education 1[a]	- 0.04	1.73	0.02
Education 2[a]	0.72	1.38	0.52
Gender[b]	- 0.68	1.15	- 0.60
African American[c]	- 1.12	1.86	- 0.60
Caucasian[c]	- 2.77	1.97	- 1.41
Exposure X Family	0.00	0.00	- 0.66
Exposure X Education 1[a]	0.01	0.07	0.10
Exposure X Education 2[a]	0.01	0.06	0.10
Exposure X Gender[b]	- 0.03	0.04	- 0.65
Exposure X African American[c]	0.02	0.06	0.36
Exposure X Caucasian[c]	0.05	0.07	0.82

Note. Adjusted $R^2 = .25$.
[a]Parent education coding: Education 1 = 1 for high school or less and 0 for some college and college graduate. Education 2 = 1 for some college and 0 for high school or less and college graduate. [b]Gender coding: 1 = girl, 0 = boy. [c]Ethnicity coding: African American = 1 for African Americans and 0 for Caucasians and Latinos. Caucasian = 1 for Caucasians and 0 for African Americans and Latinos.
*$p < .05$.

high school education or less and those adolescents who had a parent with some college education, with the other variables in the model controlled, t (100) = - 1.06, $p = .26$. Second, this slope did not differ significantly for African

American and Caucasian adolescents, t (101) = - 0.70. p = .49. The set of independent variables in the hypothesized model predicted a significant proportion of the variance in adolescents' other-intimacy schemas, F (13, 101) =3.89, p = .0000. Yet once again, none of the interaction terms significantly were related to the dependent variable.

In order to determine if the primary independent variables were related to adolescents' other-intimacy schemas, a reduced regression model, in which all interaction terms were eliminated, was evaluated. A summary of this reduced model is presented in Table 21. With the other variables in the reduced model held constant, adolescents' perceptions of their family relationships and their gender predicted their other-intimacy schemas. Adolescents with more negative perceptions of their family relationships and boys had more negative other-intimacy schemas. It can be noted that the other-intimacy schemas of adolescents whose parents had a high school education or less did not differ significantly from those of adolescents who had a parent with some college education, when the other variables in the model were controlled, t (106) = 0.11, p = .91. Furthermore, these schemas did not differ significantly for African American and Caucasian adolescents, t (107) = 1.71, p = .09.

The reduced regression model predicted a significant amount of the variance in adolescents' other-intimacy schemas, F (7, 107) = 7.36, p = .0000. The interaction terms in the hypothesized model did not account for a significant increase in the explained variance, F (6, 101) = 0.22, p > .05.

Table 21

Reduced Regression Model for Predicting Other-Intimacy Subscale Scores

Variable	B	SE B	t
Exposure	0.01	0.02	0.35
Family	0.07	0.02	3.40**
Education 1[a]	0.21	0.74	0.03
Education 2[a]	0.83	0.67	1.24
Gender[b]	- 1.28	0.56	- 2.30*
African American[c]	- 0.49	0.79	- 0.62
Caucasian[c]	- 1.50	0.85	- 1.77

Note. Adjusted $R^2 = .28$.
[a]Parent education coding: Education 1 = 1 for high school or less and 0 for some college and college graduate. Education 2 = 1 for some college and 0 for high school or less and college graduate. [b]Gender coding: 1 = girl, 0 = boy. [c]Ethnicity coding: African American = 1 for African Americans and 0 for Caucasians and Latinos. Caucasian = 1 for Caucasians and 0 for African Americans and Latinos.
*$p < .05$. **$p < .001$.

Cognitive Schemas for Other-Control

Table 22 summarizes the regression analysis of adolescents' other-control schemas on exposure to community violence, perceived quality of family relationships, level of parents' education, gender, ethnicity, and the interaction of exposure to community violence with each of the other independent variables. Evaluation of the research hypotheses was based upon the results of two tests in addition to those listed in the table. First, the slope of the relationship between exposure to community violence and other-control schemas did not differ significantly for the adolescents whose parents had a

Table 22

Hypothesized Regression Model for Predicting Other-Control Subscale Scores

Variable	B	SE B	t
Exposure	0.08	0.10	0.80
Family	0.07	0.04	1.86
Education 1[a]	0.13	1.86	0.07
Education 2[a]	0.50	1.50	0.33
Gender[b]	- 0.99	1.24	- 0.79
African American[c]	- 0.34	2.01	- 0.17
Caucasian[c]	- 0.24	2.12	- 0.11
Exposure X Family	0.00	0.00	- 0.08
Exposure X Education 1[a]	- 0.04	0.07	- 1.24
Exposure X Education 2[a]	- 0.09	0.07	- 1.24
Exposure X Gender[b]	0.02	0.05	0.39
Exposure X African American[c]	0.02	0.06	0.35
Exposure X Caucasian[c]	- 0.01	0.07	- 0.16

Note. Adjusted $R^2 = .25$.
[a]Parent education coding: Education 1 = 1 for high school or less and 0 for some college and college graduate. Education 2 = 1 for some college and 0 for high school or less and college graduate. [b]Gender coding: 1 = girl, 0 = boy. [c]Ethnicity coding: African American = 1 for African Americans and 0 for Caucasians and Latinos. Caucasian = 1 for Caucasians and 0 for African Americans and Latinos.

high school education or less and those adolescents who had at least one parent with some college education, with the other variables in the model controlled, t (102) = 0.91, p = .37. Second, this slope did not differ significantly for African American and Caucasian adolescents, t (102) = 0.62, p = .54. The

independent variables in the hypothesized model predicted a significant proportion of the variance in adolescents' other-control schemas, F (13, 102) =3.94, p = .0000. Yet none of the interaction terms were related significantly to the dependent variable. Thus, any existing relationship between the adolescents' exposure to community violence and their other-control schemas was moderated neither by their gender, ethnicity, the level of their parents' education, nor by their perceptions of the quality of their family relationships.

Table 23 presents a reduced model for predicting adolescents' other-control schemas from the primary independent variables. With each of the other independent variables in the reduced model held constant, adolescents' other-control schemas were related to their perceptions of the quality of their family relationships. Those adolescents with more negative perceptions of their family relationships held more negative beliefs and expectations regarding their need to control interpersonal situations. It can be noted that there was no significant difference in the other-control schemas of adolescents whose parents had a high school education or less and those of adolescents who had at least one parent with some college education, with the other independent variables in the model held constant, t (108) = 1.24, p = .22. Moreover, the other-control schemas of African American and Caucasian adolescents did not differ significantly, t (108) = 0.21, p = .84.

The primary independent variables predicted a significant proportion of the variance in adolescents' other-control schemas, F (7, 108) = 7.25, p = .0000.

Table 23

Reduced Regression Model for Predicting Other-Control Subscale Scores

Variable	B	SE B	t
Exposure	0.05	0.03	1.87
Family	0.07	0.02	3.38*
Education 1[a]	- 0.28	0.80	- 0.34
Education 2[a]	- 1.20	0.73	- 1.64
Gender[b]	- 0.63	0.60	- 1.06
African American[c]	0.40	0.85	0.46
Caucasian[c]	0.26	0.93	0.29

Note. Adjusted $R^2 = .28$.
[a]Parent education coding: Education 1 = 1 for high school or less and 0 for some college and college graduate. Education 2 = 1 for some college and 0 for high school or less and college graduate. [b]Gender coding: 1 = girl, 0 = boy. [c]Ethnicity coding: African American = 1 for African Americans and 0 for Caucasians and Latinos. Caucasian = 1 for Caucasians and 0 for African Americans and Latinos.
*$p < .001$.

The set of interaction terms in the hypothesized model was not associated with a significant increase in the prediction of this variance, $F(6, 102) = 0.38$, $p > .05$.

Summary of Regression Analyses

This study examined the relationship between adolescents' exposure to community violence, cognitive schemas for their psychological needs, and several social context variables. Ethnicity and level of parents' education were the only social context variables found to moderate a relationship between adolescents' community violence exposure and their schemas for a psychological need. The relationship between exposure to community violence

and other-esteem schemas was observed to differ between African American and Caucasian adolescents with similar social characteristics. Such exposure was associated with an increase in negative schemas for esteem of others among Caucasian adolescents but with a decrease in negative schemas for other-esteem among their African American peers. Among those with the most extensive exposure to community violence, Caucasian adolescents had the more negative schemas for esteem of others. The relationship between exposure to community violence and self-trust schemas was found to be different for the adolescents who had at least one parent with some college education, in comparison with those adolescents whose parents had a high school education or less. Exposure to community violence was associated with a decrease in positive schemas for self-trust among adolescents who had a parent with some college education. In contrast, there was almost no association between such exposure and the self-trust schemas of adolescents whose parents had a high school education or less. At lower levels of exposure to community violence, adolescents whose parents had at most a high school education had less positive self-trust schemas than did adolescents who had a parent with some college education but otherwise were alike in social characteristics. However, at higher levels of exposure, the self-trust schemas of the two groups of adolescents were similar.

Adolescents' exposure to community violence was related to their cognitive schemas for two additional distinct psychological needs, while the social context variables of perceived quality of family relationships, level of

parents' education, gender, and ethnicity were held constant. The adolescents with greater exposure to community violence reported more negative beliefs, assumptions, and expectations regarding their own safety and, in addition, they articulated more negative schemas for trusting other people. Several of the social context variables that were examined in the study also were related to adolescents' cognitive schemas for distinct psychological needs. Girls had more negative beliefs and expectations regarding their own safety than did boys. However, girls' schemas for intimacy were more positive than were those of boys. Adolescents whose parents had a high school education or less expressed more negative beliefs and expectations regarding their own safety than did those adolescents whose parents had more education. Caucasian adolescents described more negative schemas related to self-esteem than did African American adolescents. Finally, adolescents who had more negative perceptions of their family relationships had more negative schemas for self-trust, other-trust, self-esteem, other-esteem, other-intimacy, and other-control.

Adolescents' exposure to community violence also was related to the set of cognitive schemas for their psychological needs, with the social context variables of perceived quality of family relationships, level of parents' education, gender, and ethnicity held constant. The overall set of cognitive schemas related to psychological needs was more negative in those adolescents with greater exposure to community violence. This set of schemas also was more negative for adolescents who had more negative perceptions of their family relationships.

CHAPTER 5
DISCUSSION

This study examined the relationship between adolescents' exposure to community violence, their cognitive schemas for psychological needs, and several social context variables. Adolescents' experiences with community violence were studied from the perspective of constructivist self-development theory, a theory of psychological trauma. Through its application to a novel context, I attempted to expand the theory. The practical aims of this study were to identify a conceptual framework for understanding the cognitive schemas of adolescents who are exposed to community violence and to provide a description of these schemas. This chapter presents an analysis and evaluation of the study's success in accomplishing its theoretical and practical purposes. It begins with a discussion of the study participants' reports of their exposure to community violence. Following this is a review of the results of tests of the research hypotheses, together with possible explanations for these results. The chapter concludes with a discussion of the implications of this study and recommendations for future research.

Reports of Community Violence Exposure by Study Participants

Most of the study participants described what can be characterized as mild-to-moderate levels of exposure to violence in their communities. The adolescents in this study appear to have been exposed to more episodes of

community violence than were the nationally representative sample of adolescents who participated in the National Adolescent Student Health Survey (CDC, 1989). However, exposure to community violence for the sample of metropolitan Orlando adolescents was not as extensive as that which has been reported by adolescents living in larger urban areas (Bell & Jenkins, 1993; Singer et al., 1995). In particular, the participants in this study were less likely than adolescents living in larger cities to report exposure to severe forms of violence. For example, three out of four of the Chicago adolescents in Bell and Jenkins study had witnessed a robbery, stabbing, shooting, or killing; whereas 60% of the adolescents in the metropolitan Orlando sample had never been exposed to a knife attack, shooting, or killing. In even more striking contrast, one third of the adolescent boys, who lived in Cleveland and were surveyed by Singer et al., reported that they had been shot at or shot the previous year, yet only one boy in the metropolitan Orlando sample reported ever having been shot.

The metropolitan Orlando adolescents also reported less frequent exposure to community violence than did the Birmingham adolescents in Fitzpatrick and Boldizar's (1993) study. Although Birmingham and Orlando are comparable in size of population and rate of overall violent crime, Birmingham has a higher murder rate than does Orlando. (Over 40% of the Birmingham adolescents had witnessed a murder compared to only 8% of the Orlando adolescents.) The differing environments in which the metropolitan Orlando and Birmingham adolescents lived probably accounts, as well, for the greater

exposure to community violence reported by the Birmingham sample. Approximately one third of the Orlando adolescents had a parent with a college education. Although these adolescents attended an urban school, they were unlikely to have lived in settings that resembled those of the central-city housing communities in which the lower SES adolescents from Birmingham lived. Residence in poor urban environments is associated with greater exposure to community violence (Gladstein et al., 1992; Singer et al., 1995).

The study participants' reports of exposure to more severe forms of violence in the community are well within the limits of what is reasonable to expect when crime statistics for Orlando and its metropolitan area are considered. (Moreover, it is important to note that the adolescents' exposure to community violence was not limited to that which occurred in Orlando.) The metropolitan Orlando adolescents reported that they had been exposed to 148 knife attacks and shootings during their lifetimes. In 1993, the city of Orlando ranked 9th among 100 of the largest U.S. cities in rate of aggravated assault. For that year, the number of aggravated assaults was 2,809 for the city of Orlando and 10,743 for its metropolitan area. The study participants also reported that they had witnessed 11 killings during their lifetimes. For the year 1993, 15 murders in the city of Orlando and 69 murders in its metropolitan area were recorded.

Reports by the study participants of forced entry into their homes also were consistent with the statistics for burglaries in the Orlando area. Forty-four participants (37%) reported that their homes had been broken into at least once

during their lifetimes. The number of burglaries recorded in 1993 for the city of Orlando was 4,352; the number of burglaries recorded for the metropolitan area in the same year was 24,269.

There was considerable variation in the extent of exposure to community violence reported by the study participants. Two adolescents in the sample reported no exposure to community violence of any kind, and several others reported exceedingly limited exposure. Eleven adolescents reported that they had never seen anyone slapped, hit, or punched by someone who was not a member of that person's family. In contrast, 11 adolescents reported five or more experiences with violence of a severe nature, such as knife attacks, shootings, and killings.

No evidence exists that suggests that exposure to community violence was exaggerated by the study participants. However, exposure almost certainly was underreported by those adolescents describing no, or almost no, experience with community violence. It is reasonable to conclude that it is impossible for a student to reach middle school without ever having seen a young person slapped by another. Rather than an actual lack of exposure to community violence, these adolescents' reports may represent a tendency to have selected the lowest response alternative on the Survey of Exposure to Community Violence.

Results of Tests of the Research Hypotheses

This study hypothesized a relationship between adolescents' exposure to community violence and cognitive schemas for their psychological needs that

would vary according to the adolescents' perceptions of the quality of their family relationships, their parents' level of education, and their own gender and ethnicity. It was predicted specifically that exposure to community violence would be associated more strongly with the presence of negative cognitive schemas among adolescents with fewer positive perceptions of their family relationships. However, the study provided little evidence that these social context variables are factors contributing to the relationship between adolescents' exposure to community violence and their cognitive schemas. In tests of the study's hypotheses, ethnicity and level of parents' education were the only social context variables found to moderate a relationship between adolescents' cognitive schemas and their exposure to community violence.

The relationship between exposure to community violence and other-esteem schemas differs for African American and Caucasian adolescents with similar social characteristics. Exposure to community violence is associated with an increase in negative schemas for esteem of others among Caucasian adolescents. In contrast, such exposure is associated with a decrease in negative schemas for esteem of others among African American adolescents. Caucasian adolescents, who have the most substantial exposure to community violence, are more likely than their African American peers, who have similar levels of exposure, to believe that other people are basically bad, indifferent, or uncaring. A plausible explanation for the relationship, observed among African American adolescents, between exposure to community violence and positive schemas for esteem of others is elusive from the perspective of the theory.

However, a possible explanation for the more negative other-esteem schemas of Caucasian adolescents, with extensive exposure to community violence, might emphasize adolescents' attributions of such violence. Caucasian adolescents, who have had many experiences with community violence, may have a greater tendency than do their African American peers, who have similar levels of exposure, to attribute such violence to badness in other people. This is but one of several possible explanations that might account for this finding. An alternative explanation is that Caucasian adolescents, who have negative other-esteem schemas, are more likely than African American adolescents, with similar schemas, to enter into situations in which they will be exposed to community violence. Due to this study's correlational nature, many alternative explanations, such as this one, cannot be ruled out.

Level of parents' education moderates a relationship between adolescents' exposure to community violence and their schemas for self-trust, when the other social context variables are held constant. Exposure to community violence is associated with a decrease in positive schemas for self-trust among adolescents who have a parent with some college education. However, there is almost no association between such exposure and the self-trust schemas of adolescents whose parents have a high school education or less. Among the adolescents who have a parent with some college education, those with less exposure to community violence articulate very positive beliefs about their ability to make good decisions; those with greater exposure describe self-trust schemas that are less positive although not explicitly negative. In

contrast, adolescents, whose parents have a high school education or less, have self-trust schemas that are neither very positive nor explicitly negative regardless of their exposure to community violence. One possible explanation for these findings is that adolescents are particularly motivated to possess positive beliefs about their decision-making ability. Even those adolescents, who exhibit poor judgment by placing themselves in dangerous situations, may maintain positive beliefs about their ability to make good decisions. Exposure to mild-to-moderate levels of community violence may well be associated with diminished positive schemas for self-trust, as was found among adolescents whose parents have some college education. However, exposure to such levels of community violence may not be associated with explicitly negative schemas for self-trust.

Analyses of the hypothesized models for predicting adolescents' cognitive schemas from their exposure to community violence resulted in the identification of only two relationships that were moderated by a social context variable. In order to accomplish the goal of describing the assumptions, beliefs, and expectations of adolescents who are exposed to recurrent violence in their communities, it was necessary to evaluate simpler models for predicting adolescents' cognitive schemas from their community violence exposure. The interaction terms, which were associated with hypotheses that relationships between adolescents' community violence exposure and their cognitive schemas would be moderated by social context variables, were eliminated from the simpler, reduced models. Several significant main effects were identified in

the analyses of these reduced models for predicting adolescents' cognitive schemas.

Exposure to community violence is related to adolescents' schemas for two psychological needs in addition to self-trust and other-esteem. Adolescents with exposure to more episodes of community violence are more likely to perceive themselves as vulnerable to harm than are adolescents with similar social characteristics (perceived quality of family relationships, level of parents' education, gender, and ethnicity) but who have less exposure to community violence. Adolescents with greater exposure to community violence also are more likely to believe other people to be untrustworthy. Overall, those cognitive schemas related to psychological needs are more negative for the adolescents with greater exposure to community violence. By contrast, adolescents' exposure to community violence is not related significantly to their schemas for self-esteem, other-intimacy, or other-control, when the social context variables are held constant. Further, adolescents' beliefs and expectations about the safety of their friends and family are not related significantly to the set of variables that comprises exposure to community violence, perceived quality of family relationships, level of parents' education, gender, and ethnicity.

Several relationships were identified between social context variables and adolescents' schemas for their psychological needs. With exposure to community violence and social context variables held constant, girls are more likely than boys to perceive themselves as vulnerable to harm. On the other hand, girls are more likely than boys to believe themselves to be close to and

connected with others. With exposure to community violence and social context variables controlled, adolescents whose parents have a high school education or less are more likely to have negative beliefs and expectations regarding their own safety. Ethnicity is related to adolescents' self-esteem when exposure to community violence and social context variables are held constant. Caucasian adolescents report less positive self-esteem schemas than do African American adolescents. Finally, adolescents' perceptions of the quality of their family relationships are related to most of the cognitive schemas that were examined in this study. With exposure to community violence and social context variables held constant, adolescents with more negative perceptions of the quality of their family relationships have less positive schemas for self-trust, other-trust, self-esteem, other-esteem, other-intimacy, and other-control. Additionally, the overall set of schemas related to psychological needs is less positive in these adolescents.

The results of this study are consistent with Richters and Martinez' (1993b) conclusion that adaptational failure is the exception rather than the rule for young people living in moderately violent urban environments. Most of the adolescents in this study have been exposed to mild-to-moderate levels of community violence and yet have positive beliefs and expectations regarding their own worth and their intimate relationships with others.

Schemas related to their own safety and their trust of others are more negative among adolescents with greater exposure to community violence. However, one interpretation of these findings is that cautious attitudes about

safety and trust represent a positive adaptation to community violence exposure. Believing oneself to be vulnerable to harm and believing other people to be capable of behaving in an untrustworthy manner may be requisite for motivating an individual to take safety precautions. Williams et al. (1994) found that adolescents who had been exposed to more episodes of community violence were more likely to adopt a variety of safety measures. Beliefs about one's vulnerability to harm and other people's potential for behaving in an untrustworthy manner may mediate individuals' exposure to community violence and their exercise of precautionary behaviors. If negative beliefs regarding safety and others' trustworthiness can be positive adaptations to community violence exposure, then the lack of interaction between exposure to community violence and perceived quality of family relationships is understandable. Perhaps families do not, even should not, cultivate the assumptions that, in a world in which one is likely to encounter violence, one is invulnerable to harm and other people are generally trustworthy. Indeed, families may even reinforce negative beliefs about safety and others' trustworthiness in an effort to enhance their children's safety. There is a caveat to the conclusion that negative beliefs about safety represent a positive adaptation to community violence exposure. A more cautious attitude about safety may motivate adolescents to take appropriate safety precautions, such as not walking alone at night. However, concerns about safety also may motivate adolescents to adopt behaviors that place them at increased risk of exposure to violence. Some researchers have concluded that a concern about personal

safety is adolescents' primary motivation for carrying weapons (Wright et al., 1992).

It should be noted that many of the adolescents in this study have somewhat negative beliefs about the need to exert control in interpersonal relationships although other-control schemas are not related significantly to exposure to community violence. Because this study included only urban adolescents, it is not known whether negative schemas for other-control are prevalent among adolescents, in general, or whether these negative schemas are more characteristic of adolescents from urban environments.

Once again, it is emphasized that this is a correlational study. There are several possible explanations for the relationship between adolescents' exposure to community violence and their cognitive schemas for self-safety and other-trust. Exposure to community violence may not cause negative schemas for safety and trust. Instead, some third factor (other than perceived quality of family relationships, level of parents' education, gender, or ethnicity) may influence adolescents both to be exposed to community violence and to develop more negative schemas for safety and trusting others. Yet another possibility is that adolescents, who perceive others as untrustworthy and themselves as unsafe in the world, are more apt to place themselves in situations wherein they encounter violence. Indeed, such an occurrence is consistent with a postulate of constructivist self-development theory. According to the theory, individuals' experiences shape their schemas, which, in turn, shape the individuals' experiences. Furthermore, it might be expected that

adolescents, who have more negative schemas for self-safety and other-trust, are more likely to interpret an ambiguous event as threatening or violent than are those adolescents whose schemas are more positive. The adolescents with negative schemas for safety and trust also might be more likely to remember violent events. Thus, from the perspective of the theory, several relevant explanations exist for the relationship between adolescents' exposure to community violence and certain schemas.

Theoretical Implications of the Study

This study provides some support for constructivist self-development theory. It offers evidence that the theory generates successful predictions about certain cognitive schemas of adolescents who are exposed to recurrent violence in their communities. Constructivist self-development theory itself does not include descriptions of and predictions about the experiences of adolescents who are exposed to multiple episodes of community violence. Therefore, this study helps to expand the theory by demonstrating its useful application to a novel context.

The results of this study also raise a question about the accuracy of certain other predictions that may be derived from constructivist self-development theory. To an appreciable extent, this study failed to find that the relationship between adolescents' exposure to community violence and their cognitive schemas varied in ways suggested by the theory. An example of a finding that fails to support a hypothesis, embedded in the theory, is the observed relationship between exposure to community violence and the self-

safety schemas of girls and adolescents whose parents have a high school education or less. Girls and adolescents whose parents have the least amount of education express more negative beliefs about their own safety, when exposure to community violence and social context variables are controlled. An inference that follows from the theory is that the negative schemas associated with the need for self-safety indicate that this need is more prominent in girls and adolescents whose parents have the least amount of education. According to the theory, the schemas associated with the prominent need for self-safety should be more vulnerable to disruption in girls and adolescents whose parents have a high school education or less. However, the results of this study show that the relationship between exposure to community violence and negative schemas for self-safety is no stronger for girls than it is for boys. Moreover, this relationship is no stronger for adolescents whose parents have the least amount of education than it is for adolescents whose parents have more education. In other words, there is no evidence from this study that schemas associated with needs that are prominent are more vulnerable to disruption. It is true that, at any level of exposure to community violence, a girl has greater likelihood of having a more negative schema for self-safety than does a boy of the same ethnicity, with the same perceived quality of family relationships, and whose parents have the same level of education. Thus, at increasing levels of exposure to community violence, a girl is more likely than a boy to have a schema for self-safety that is negative to the extent that it might be considered to be maladaptive. The greater likelihood that exposure to a potentially traumatic

event will result in a maladaptive schema may be what constructivist self-development theory means by a schema's vulnerability to disruption. However, exactly what is meant for a schema to be vulnerable to disruption is ambiguous and, consequently, clarification is needed from the theory.

Once again, it is emphasized that this is a correlational study. That there is an effect on adolescents' cognitive schemas caused by their exposure to community violence would be but one of several possible explanations for a correlation between schemas and exposure. Constructivist self-development theory does postulate a cause and effect relationship between traumatic events and schemas that is influenced by factors such as individuals' social and cultural context and developmental histories. This discussion assumes that a cause and effect relationship might exist where a correlation is found and, further, that a correlation is a necessary prerequisite for a causal relationship. Cause and effect relationships were considered above as one possible explanation for correlations that were found in this study. Where a cause and effect relationship was predicted from the theory, but no correlation found, the existence of that cause and effect relationship was questioned.

Implications of the Study for Practitioners

In order to determine more fully whether constructivist self-development theory offers a reliably useful framework for understanding the cognitive schemas of adolescents who are exposed to community violence, studies are needed that have a larger sample size and that include adolescents with more extensive exposure to community violence. Nevertheless, the findings of this

study suggest that the theory does, indeed, provide practitioners with a useful framework for understanding the schemas of adolescents who are exposed to mild-to-moderate levels of violence in their communities.

Two relationships between psychological trauma and cognitive schemas, which are identified in constructivist self-development theory, are specifically relevant for the study of adolescents' exposure to community violence. In general, adolescents' exposure to mild-to-moderate levels of community violence is associated with negative schemas for self-safety and other-trust. It is noteworthy that no evidence was found for relationships between exposure to community violence and schemas for self-esteem, other-intimacy, and other-control. The theory provides an explanation, accessible to practitioners, for these findings. Most adolescents accommodate their schemas for self-safety and other-trust so that they are able to integrate information about community violence into these schemas. However, evidence is lacking for the supposition that adolescents modify their schemas about their own worth, their intimate relationships, and their need to exert control within interpersonal relationships in order to construct an understanding of their experiences with community violence. It should be noted that this explanation assumes that exposure to community violence influences adolescents' schemas. Other explanations exist for relationships between community violence exposure and cognitive schemas. Moreover, there are several possible explanations for this study's failure to find significant relationships between exposure to community violence and self-esteem, other-intimacy, and other-control. In fact, there may be no

significant relationships between these variables. Alternatively, this study's sample size may have been too small for significant relationships between these variables to be detected. Yet another possible explanation is that significant relationships were not found because self-esteem, other-intimacy, and other-control were poorly measured in this study.

According to constructivist self-development theory, adolescents' accommodation of their schemas, for the purpose of integrating information from the environment, is indicative of healthy psychological functioning as long as the schemas do not become very negative. Thus, adolescents who view themselves as invulnerable to harm and assume that other people can always be trusted may not take adequate safety precautions. However, those who believe that the world is a very unsafe place and that virtually no one can ever be trusted probably are more likely to experience severe distress and develop behavioral response patterns (e.g., avoidance, aggression) that are maladaptive in many environments. The theory suggests that it is those who have flexible schemas, understanding that the world is sometimes safe and sometimes unsafe and that it is sometimes wise to trust and sometimes unwise to trust, who have the best adaptation.

Findings from this study, interpreted within this theoretical framework, suggest that one group of adolescents, in particular, is at increased risk for an adaptational failure. These are the adolescents with more extensive experiences with violence in their communities. A relatively small number of the adolescents who participated in this study had many exposures to community

violence. These adolescents also were more likely to have been exposed to violence of a severe nature, such as knife attacks, shootings, and killings. Their schemas for safety and trusting others are too negative to be described as merely cautious. These adolescents appear to expect that they cannot depend upon other people and to believe that the world is a dangerous place.

An implication for violence prevention programs is that the adolescents with greater exposure to community violence need guidance in developing flexible schemas for safety and trust. It is likely that adolescents will develop such flexible schemas only if provided the psychological, human, and material resources for satisfying needs for safety and trust.

Recommendations for Future Research

Following are recommendations for studies that would advance the understanding of the psychology of adolescents who are exposed to community violence.

1. In the present study, the assessment of adolescents' cognitive schemas was limited to the measure of their self-reported beliefs and expectations. Further research is needed to determine whether these self-reported beliefs and expectations actually represent cognitive schemas, that is, knowledge structures that contribute to controlling the processing of information. One hypothesis that might be tested is that adolescents who have generalized negative beliefs about self-safety are more likely to interpret, as threatening, behavior whose meaning is ambiguous.

2. Research is needed to discover if adolescents who have very negative schemas for safety and trust are, in fact, distressed. Previous research has identified a relationship between exposure to community violence and distress among urban adolescents. Correlational studies could be designed to determine whether negative schemas for safety and trust moderate this relationship.

3. This study assessed adolescents' cognitive schemas on a continuum that ranged from very positive to very negative. Many adolescents, with exposure to mild-to-moderate levels of community violence, were found to have schemas for self-safety and other-trust that were somewhat negative. Additional information about adolescents' psychological functioning would be obtained from a measure that included an assessment of the degree to which adolescents' psychological need-related schemas are flexible. Scores from such a measure might indicate whether an adolescent has a very positive, very negative, or flexible schema for a psychological need.

4. Studies are needed to determine whether adolescents' schemas for psychological needs predict specific behaviors. Several relationships, which have practical significance, need examination. These include the relationship between self-safety schemas and the adoption of appropriate safety precautions (e.g., not walking alone at night) and the relationship between self-safety schemas and the adoption of problematic safety precautions (e.g., carrying a weapon).

5. Further research is needed to determine whether adolescents' exposure to community violence is related to their cognitive schemas in the manner identified in this study. Significant relationships between this study's independent and dependent variables might well exist but could not be identified here due to measurement error associated with the Self- and Others-Schemas Scale. Such relationships might be found in future studies if safety, trust, esteem, intimacy, and control were assessed with other instruments. In particular, further study is needed to discover whether relationships, which have particular significance for constructivist self-development theory, might be identified if another measure of cognitive schemas were used.

Very different relationships between exposure to community violence and cognitive schemas might be identified if adolescents with very extensive exposure are included in a study's sample. For example, some researchers have concluded that young people become desensitized to violence in their communities. A curvilinear relationship between community violence exposure and self-safety schemas might be found if adolescents with very extensive exposure are included in the sample.

6. Further research is needed to gain a better understanding of the relationship between adolescents' exposure to community violence and their schemas for other-esteem. A study that could contribute to this understanding would comprise several experimental conditions to which adolescents were randomly assigned. In this study, adolescents would be provided descriptions of an episode of community violence, the descriptions varying slightly across

the different conditions. The adolescents would have the task of identifying the causes of the episode. From this study, the circumstances under which adolescents are most likely to attribute violence to badness in people might be determined.

Summary of Discussion

This study applies constructivist self-development theory to the study of adolescents' exposure to community violence. The theory successfully yields predictions about the relationship of community violence exposure to some cognitive schemas of adolescents. However, this study failed to find evidence that this relationship is moderated in many of the ways suggested by the theory. Adolescents' gender, ethnicity, perceptions of the quality of their family relationships, and the level of their parents' education generally are not significant factors in the interrelationship of cognitive schemas and community violence exposure. This study identified correlations, rather than causal relationships, between variables. Nevertheless, causal relationships, which are postulated in the theory, are considered as one possible explanation for the correlations that were obtained.

APPENDIX A
DIRECTIONS FOR CONTENT VALIDATION PROCEDURE

Directions:

Match each item to one of the following schemas that relate to psychological needs. Schemas overlap slightly. For example, the belief that most people are selfish might be considered an example of a negative other-trust schema and an example of a negative other-esteem schema. In this study, you are asked to match each item to the schema that it most closely exemplifies. Next to each item, write the initials of the type of schema (e.g., SS for a self-safety schema) for which the item is an example. There are two different types of negative self-control and negative other-control schemas. Indicate which negative control schema an item represents by placing the appropriate number after the initials of the schema.

Definitions of Positive and Negative Schemas Related to Psychological Needs:

A. Self-Safety.

1. A positive self-safety schema is indicated by (a) the belief that one is reasonably invulnerable to harm or (b) the belief that one is capable of protecting oneself from future harm, injury, or loss.

2. A negative self-safety schema is indicated by (a) the belief that one is vulnerable to harm, injury, or loss or (b) the belief that one cannot protect oneself from future harm, injury, or loss.

B. Other-Safety.

1. A positive other-safety schema is indicated by the belief that one's family and friends are reasonably invulnerable to harm.

2. A negative other-safety schema is indicated by the belief that one's family and friends are vulnerable to harm.

C. Self-Trust.

1. A positive self-trust schema is indicated by the belief that one can trust one's own judgment and one's own ability to make decisions.

2. A negative self-trust schema is indicated by the belief that one cannot trust one's own judgment or one's own ability to make decisions.

D. Other-Trust.

1. A positive other-trust schema is indicated by the belief that, in general, one can trust or rely upon others.

2. A negative other-trust schema is indicated by the belief that, in general, people cannot be trusted.

E. Self-Esteem.

1. A positive self-esteem schema is indicated by the belief that one is valuable and worthy of respect.

2. A negative self-esteem schema is indicated by the belief that the self is bad or damaged.

F. Other-Esteem.

1. A positive other-esteem schema is indicated by the belief that other people have more good than bad qualities.

2. A negative other-esteem schema is indicated by (a) the belief that other people are basically bad, evil, or malicious or (b) the belief that other people are basically uncaring, indifferent, and only out for themselves.

G. Self-Intimacy.

1. A positive self-intimacy schema is indicated by (a) the belief that time spent alone is enjoyable or (b) the belief that one is capable of soothing, comforting, or nurturing oneself.

2. A negative self-intimacy schema is indicated by (a) the expectancy that one will feel empty or lonely when alone or (b) the belief that one will be unable to soothe, comfort, or nurture oneself.

H. Other-Intimacy.

1. A positive other-intimacy schema is indicated by the belief that one is close and connected to others.

2. A negative other-intimacy schema is indicated by the belief that one is unloved by and disconnected from other people.

I. Self-Control.

1. A positive self-control schema is indicated by the belief that one can exert reasonable control over one's feelings and behavior.

2. One negative self-control schema is indicated by the expectancy that one will be helpless to control one's feelings or actions.

3. Another negative self-control schema is indicated by the belief that one must be in control of one's emotions and actions at all times and that any sign of vulnerability is a sign of weakness.

J. Other-Control.

1. A positive other-control schema is indicated by the belief that one is able to influence others and exert reasonable control in interpersonal situations.

2. One negative other-control schema is indicated by the belief that one has little influence or control in interpersonal situations.

3. Another negative other-control schema is indicated by (a) the belief that one must be in control of interpersonal situations at all times or (b) the belief that other people expect or wish to be controlled by another.

APPENDIX B
SELF- AND OTHERS-SCHEMAS SCALE

Below each statement, please circle the number that you think best describes your beliefs. You do not have to answer any question you do not wish to answer.

1. Item 1 from the TSI Belief Scale.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

2. Item 2 from the TSI Belief Scale.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

3. I worry about getting hurt.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

4. The world is a safe place. There is no reason to worry about the safety of friends and family.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

5. Item 6 from the TSI Belief Scale.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

6. I feel bad about myself.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

7. I know my family will always be safe.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

8. I trust most people.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

9. Item 18 from the TSI Belief Scale.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

10. Most people want to help others.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

11. Item 22 from the TSI Belief Scale.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

12. Other people often listen to my ideas and take my advice.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

13. Most people are basically caring.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

14. This world is filled with bad people.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

15. Item 32 from the TSI Belief Scale.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

16 I can protect myself from getting hurt.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

17. I often feel that something is wrong with me.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

18. Item 35 from the TSI Belief Scale.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

19. I feel close to many people.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

20. I often find myself in dangerous situations.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

21. I wish teachers would not tell me what to do.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

22. I have friends who really care about me.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

23. Item 40 from the TSI Belief Scale.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

24. Item 41 from the TSI Belief Scale.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

25. Even though I'm not perfect, I'm a terrific person.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

26. I often seem to make bad decisions.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

27. I worry that someday I will be in a situation where I will not be able to protect myself.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

28. I often feel lonely.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

29. Item 50 from the TSI Belief Scale.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

30. I worry about having my things taken from me.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

31. I worry about my friends getting hurt.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

32. My friends and family often listen to me and agree to do the things that I like to do.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

33. Item 56 from the TSI Belief Scale.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

34. I enjoy being with the other students at my school.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

35. People are always trying to tell me what to do.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

36. I worry that burglars might break into my family's home.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

37. Item 64 from the TSI Belief Scale.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

38. Item 66 from the TSI Belief Scale.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

39. I usually decide what my friends and I are going to do.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

40. I usually make good decisions.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

41. I often worry that something might happen to the people I care about.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

42. I am proud of the way I handle problems.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

43. I can think of the right thing to do in most situations.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

44. Item 78 from the TSI Belief Scale.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

45. Item 33 from the TSI Belief Scale.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

46. When someone in my family is late coming home, I worry that something might have happened to them.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

47. I would rather take advice from other people about important decisions because I don't have very good judgment.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

48. I am good at solving problems.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

49. I can always find someone to help me when I need help.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

50. Look out for yourself because no one else will.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

51. Many people hurt other people.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

52. There are days when I hate myself.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

53. I am an attractive and intelligent person.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

54. I have some friends whom I really love.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

55. My friends prefer for me to decide what we are going to do.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

56. If someone disagrees with me, they are going to get an argument.

1	2	3	4	5
Strongly Disagree	Disagree		Agree	Strongly Agree

APPENDIX C
PARENTAL CONSENT FORMS

Consent for Middle-School Students' Participation

Dear Parent or Guardian:

I am a doctoral candidate in school psychology at the University of Florida and would like to invite your child to take part in a study that will be the basis of my dissertation. From the study, I hope to determine if there is a relationship between adolescents' beliefs about themselves and the world and the frequency with which they have witnessed or been subject to different forms of physical threat or violence in the community. I also plan to study whether a supportive relationship with one's parents might help adolescents to maintain more positive beliefs about themselves and the world despite experiences with violence in the community. The forms of community violence that an adolescent might encounter and that I plan to study include such experiences as being chased by another adolescent or seeing someone use a weapon. The adolescents who participate in this study will be asked about how they view their relationship with their parents. They will not be asked about family members' use of physical force because that is not the focus of this study.

If you agree to allow your child to participate in this study, your child will be given (a) a questionnaire that asks about the frequency with which adolescents have witnessed or been subject to various forms of physical threat

or violence in the community, (b) a questionnaire about adolescents' beliefs about themselves and the world, (c) a questionnaire about adolescents' perceptions of their relationships with their parents, and (d) a question about the highest level of education attained by the adolescents' parents. Your child does not have to answer any question on the questionnaires that he or she does not wish to answer. You or your child may terminate permission for his or her participation at any time for any reason. Your child will receive $5 for participating in this study. All results of this study are strictly confidential. Your child will be given a number to put on the questionnaires instead of his or her name. This number will appear on all results. Your child's identity will not be revealed to anyone or appear on any written work. Total testing time will be about one hour. Testing will occur during: (a) Magic, a nonacademic class. Your child will not miss any academic work. (b) Social Studies as a demonstration of social science research. Students who do not participate in the study will work on independent class projects. Participation or nonparticipation in this study will not affect your child's grades in school.

Thank you for considering my request. If you have any questions concerning your child's participation in this study, I can reached at 849-3200 ext. 2636.

Sincerely,

Janice Devlin, M.Ed., M.S.

(Please sign and return to your child's teacher if you agree to allow your child to participate in this study.)

I have read the study's procedures that have been described above. I have received a copy of this description and give consent for _____ (adolescent's name) to take part in the study on the relationship between adolescents' beliefs about themselves and the world and the frequency with which they have witnessed or been subject to different forms of physical threat or violence in the community.

Parent/Guardian Signature(s): _____

_____

Date: _____

Consent for Esteem Teen Members' Participation

Dear Parent or Guardian:

I am a doctoral candidate in school psychology at the University of Florida and would like to invite your child to take part in a study that will be the basis of my dissertation. From the study, I hope to determine if there is a relationship between adolescents' beliefs about themselves and the world and the frequency with which they have witnessed or been subject to different forms of physical threat or violence in the community. I also plan to study whether a supportive relationship with one's parents might help adolescents to maintain more positive beliefs about themselves and the world despite experiences with violence in the community. The forms of community violence that an adolescent might encounter and that I plan to study include such experiences as being

chased by another adolescent or seeing someone use a weapon. The adolescents who participate in this study will be asked about how they view their relationship with their parents. They will not be asked about family members' use of physical force because that is not the focus of this study.

If you agree to allow your child to participate in this study, your child will be given (a) a questionnaire that asks about the frequency with which adolescents have witnessed or been subject to various forms of physical threat or violence in the community, (b) a questionnaire about adolescents' beliefs about themselves and the world, (c) a questionnaire about adolescents' perceptions of their relationships with their parents, and (d) a question about the highest level of education attained by the adolescents' parents. Your child does not have to answer any question on the questionnaires that he or she does not wish to answer. You or your child may terminate permission for his or her participation at any time for any reason. All results of this study are strictly confidential. Your child will be given a number to put on the questionnaires instead of his or her name. This number will appear on all results. Your child's identity will not be revealed to anyone or appear on any written work. Total testing time will be about one hour. Participation in the study will take about one hour. Testing will occur during the Esteem Teen program. Participation or nonparticipation in this study will not affect your child's standing in the Esteem Teen program. Your child will be compensated $10 for participating in this study.

Thank you for considering my request. If you have any questions concerning your child's participation in this study, I can reached at 679-7106.

Sincerely,

Janice Devlin, M.Ed., M.S.

(Please sign and return to the Esteem Teen program if you agree to allow your child to participate in this study.)

I have read the study's procedures that have been described above. I have received a copy of this description and give consent for

_____ (adolescent's name) to take part in the study on the relationship between adolescents' beliefs about themselves and the world and the frequency with which they have witnessed or been subject to different forms of physical threat or violence in the community.

Parent/Guardian Signature(s): _____

_____

Date: _____

APPENDIX D
CHILD ASSENT SCRIPTS

Child Assent Script for Middle-School Students

My name is Ms. Devlin, and I am a graduate student at the University of Florida. I am inviting you to take part in a research study. This study has to do with the experiences that students your age have with violence in their community. Other studies have found that adolescents sometimes have experiences such as being chased by other students or seeing someone use a weapon. The purpose of my study is to understand what adolescents, who have experiences with violence in their communities, think about themselves and the world. Another purpose of my study is to find out whether relationships with parents can influence what adolescents think about themselves and the world when those adolescents have experienced violence in their community. You will not be asked about the use of violence or physical force by members of your own family.

If you agree to take part in this study, you will be given three questionnaires. The first questionnaire asks about how often you have seen or experienced different kinds of physical threat or violence in the community. The second questionnaire asks about your beliefs about yourselves and the world. The third questionnaire asks about whether you feel satisfied with your

relationship to your parents. All three questionnaires will take about an hour to complete.

(a) The students who wish to take part in this study will do so during a nonacademic class. You will not miss any classwork that needs to be made up. (b) The students who wish to take part in this study will do so during Social Studies class. Those not participating in the study will work independently on class projects. Taking part or not taking part in this study will not affect your grades or how you are treated in school in any way. Your answers on the questionnaires are confidential. You will be given a number to put on the questionnaires instead of your name. This means that no one can find out how you answered any questions. If you agree to take part in the study and then change your mind, you do not have to take part in the study. Also, you can stop any time you want for whatever reason.

You do not have to answer any item on the questionnaires that you do not wish to answer. If you become frightened, sad, or upset when thinking about a time when you experienced an incident involving violence, it is a good idea to talk to someone about it. Your school counselor and S.A.F.E. coordinator are here at school to talk with young people about such experiences. I am happy to help you to arrange a meeting with your school counselor or S.A.F.E. coordinator if you would like to talk to someone about an

Child Assent Script for Esteem Teen Members

My name is Ms. Devlin, and I am a graduate student at the University of Florida. I am inviting you to take part in a research study. This study has to do with the experiences that students your age have with violence in their community. Other studies have found that adolescents sometimes have experiences such as being chased by other students or seeing someone use a weapon. The purpose of my study is to understand what adolescents, who have experiences with violence in their communities, think about themselves and the world. Another purpose of my study is to find out whether relationships with parents can influence what adolescents think about themselves and the world when those adolescents have experienced violence in their community. You will not be asked about the use of violence or physical force by members of your own family.

If you agree to take part in this study, you will be given three questionnaires. The first questionnaire asks about how often you have seen or experienced different kinds of physical threat or violence in the community. The second questionnaire asks about your beliefs about yourselves and the world. The third questionnaire asks about whether you feel satisfied with your relationship to your parents. Participation in the study will take about an hour. You will be given $10 for participating in the study.

The students who wish to take part in this study will do so during the Esteem Teen program. Taking part or not taking part will not affect how you are treated in the Esteem Teen program in any way. Your answers on the

questionnaires are confidential. You will be given a number to put on the questionnaires instead of your name. This means that no one can find out how you answered any questions. If you agree to take part in the study and then change your mind, you do not have to take part in the study. Also, you can stop any time you want for whatever reason.

You do not have to answer any item on the questionnaires that you do not wish to answer. If you become upset when thinking about a time when you experienced an incident involving violence, it is a good idea to talk to someone about it.I would be happy to talk with you about any of these experiences if you would like to discuss them.

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BIOGRAPHICAL SKETCH

Janice Devlin was born August 5, 1951, in New Haven, Connecticut. She graduated from the University of Central Florida in 1974 with a Bachelor of Arts degree in elementary education and in 1976 with a Master of Education in counselor education. In 1987, she obtained a Master of Science degree in clinical psychology from the University of Central Florida. Janice has been an elementary school counselor in Orange and Seminole counties of Florida. In addition, she has worked as a counselor at a private agency. She lives with her husband, who also is an educator, in Orlando, Florida.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for this degree of Doctor of Philosophy.

John H. Kranzler, Chair
Associate Professor of
Foundations of Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for this degree of Doctor of Philosophy.

Patricia T. Ashton
Professor of Foundations of
Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for this degree of Doctor of Philosophy.

Craig L. Frisby
Associate Professor of
Foundations of Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for this degree of Doctor of Philosophy.

Mary Howard-Hamilton
Associate Professor of
Counselor Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for this degree of Doctor of Philosop .

M. David Miller
Professor of Foundations of Education

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

December 1997

Chairman, Foundations of Education

Dean, College of Education

Dean, Graduate School